

Dissertation

**Case variation in nominative object constructions  
in the history of Russian: A corpus-based approach**

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von Dipl. Uliana Yazhina

Präsidentin der Humboldt-Universität zu Berlin

**Prof. Dr. -Ing. Dr. Sabine Kunst**

Dekanin der Sprach- und literaturwissenschaftlichen Fakultät

**Prof. Dr. Ulrike Vedder**

Gutachter:

1. **Prof. Dr. Roland Meyer**

2. **Prof. Dr. Luka Szucsich**

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# Abstracts

## English Version

This dissertation presents a diachronic study on case variation in so called “nominative object constructions” attested in Old and Middle Russian, and in some modern North Russian dialects. There are different types of constructions, which share the same modal semantics of ‘(deontic) necessity’ and contain an infinitive or gerund with a noun in nominative case expressing the patient of the infinitive. The origin of those type of constructions in Russian and the syntactic status of the argument in nominative has been widely discussed and different explanations have been suggested in various historical and typological works on this phenomenon. In the last decades, many authors investigated the mechanism of the case marking and case variation between the nominative and accusative object constructions, which was mostly ignored in previous studies or explained as random and unmotivated.

In this study, I account for the differences in the paralleled use of nominative and accusative object constructions. This interchangeability is often explained as complementary use (distribution) of two variants of one construction or as a simply stylistic variation, but in fact, this is the expression of two independent competing rules (in means of “competing grammar approach”). The goal of this study is to present the results of a first extensive quantitative corpus-based analysis on theoretical considerations about development and micro-changes in these types of constructions with special focus on the different factors determining the case choice. It will be shown in this study that constructional change at the morphological level does not happen in complete isolation from developments at other levels. In addition, each constructional change can have repercussions on other constructions. In the case of nominative object construction and the case variation with accusative, a variety of linguistic and non-linguistic factors can be assumed to interact. Hence, the diachronic change of different constructional variants can also be interpreted as a case of functional re-organization in that non-canonical object marking constructions.

## Deutsche Fassung

Diese Dissertation legt eine diachrone korpuslinguistische Untersuchung der Kasusvariation in sog. Nominativobjekt-Konstruktion in der Geschichte der russischen Sprache. Bei der Nominativobjekt-Markierung handelt es sich um eines der in der Geschichte der russischen Sprache erscheinenden syntaktischen Merkmale, das auch in mehreren ostslawischen und ostbaltischen Dialekten sowie den westfinnischen Sprachen zu finden ist. Unter der Bezeichnung "Nominativobjekt" wurde dieses Phänomen in der Fachliteratur bereits mehrfach analysiert, dabei wird in (zumeist) selbstständigen Sätzen mit infinitivischem oder partizipialem Prädikat das Patiensargument mit Nominativ (statt Akkusativ) markiert. Den verschiedenen Arten solcher weitgehend parallelen syntaktischen Strukturen ist auch dieselbe modale Semantik ‚(deontischer) Notwendigkeit‘ gemeinsam. Diese Art von Konstruktion lässt sich in der frühen russischen Schriftsprache bis zum 12. Jahrhundert nachweisen und wurde allgemein, wenn auch nicht durchgehend, in der russischen Kanzleisprache des 16. und 17. Jahrhunderts verwendet, wonach sie aus der Schriftsprache verschwand und z.T. nur noch in heutigen nordrussischen Dialekten mundartlich wurde. Ziel der Analyse ist es das Auftreten des Nominativs im Vergleich zum ebenfalls auftretenden und (aus der Perspektive des heutigen Standardrussischen) erwartbaren Akkusativ anhand von korpuslinguistische Studie zu beschreiben und zu erklären. In der vorliegenden Untersuchung wird der Versuch unternommen, eine multifaktorielle diachronische Analyse zu liefern, um die sprachlichen und außersprachlichen Faktoren (wie Dialekt- oder Registervariation) zu ermitteln, die eine Kasusvariation auslösen. Außerdem wird eine Rekonstruktion der Mikroverschiebungen in Kasuszuweisungsstrategien bei verschiedenen Arten derartiger Konstruktionen angestrebt. Ein zentrales Ergebnis der Studie ist, dass bereits in den ältesten Dokumenten beide primäre Konstruktionen mit einem Nominativ und einem Akkusativ zu finden sind, die auch noch nicht als völlig austauschbare, sondern ursprünglich als zwei voneinander unabhängige Konstruktionen existierten und zwei koexistierende Regeln produzierten. Aufgrund der empirischen Daten könnte man auch zeigen, dass diese Art der Kasusvariation nicht als Korrelation allein mit einem einzigen Faktor zu erklären ist, sondern nur als Zusammenspiel von verschiedenen Faktoren möglich ist. Schließlich lässt sich festhalten, dass die Veränderungen in den Nominativobjekt-Konstruktionen mit der Entwicklung anderer Kategorien, speziell der Belebtheitskategorie im Russischen sowie mit der Kontamination mit anderen modalen Konstruktionen zusammenhängen.

Keywords:

Nominative object, case variation, diachronic corpuslinguistics, Kanzleisprache

# Table of contents

Acknowledgements .....	9
List of Transliteration .....	13
Sources .....	15
1. Introduction .....	19
1.1. Main objectives .....	19
1.2. The constructions and research questions in focus.....	21
1.3. Outline of the book.....	24
2. Fundamentals: The construction and language varieties being researched.....	26
2.1. General characteristics of Nominative Object Constructions (NOCs).....	26
2.1.1. Semantic aspects of NOCs .....	28
2.1.2. Realizations and subtypes of NOCs .....	28
2.1.3. Aspects of case variation (NOM vs. ACC) .....	36
2.2. Varieties of Russian with NOCs .....	39
2.2.1. Diachronic and genre-specific aspects of NOCs .....	39
2.2.2. Characteristics of the Middle Russian period.....	40
2.2.3. Characteristics of Middle Russian chancellery language .....	43
3. Theoretical approaches and research history.....	46
3.1. General remarks on research into language variation .....	54
3.2. Competing explanations for the origin of NOCs.....	56
3.2.1. The traditional approach: Early descriptions .....	56
3.2.2. The traditional approach: NOCs as a Russian innovation .....	57
3.2.3. The traditional approach: Focus on the Indo-European heritage.....	61
3.2.4. Critic on Timberlake's Impersonal Theory .....	76
3.2.5. Dunn's (1978) theory.....	80
3.3. Possible conditions and constraints for the nominative object construction .....	83
3.3.1. Morphological restrictions.....	83
3.3.2. The category of animacy .....	89
3.3.3. Dialectal use of the NOCs .....	93
3.3.4. Syntactic hypotheses.....	99
3.4. The Competing Grammar Approach.....	108
4. Data sources and methodology .....	113
4.1. Motivation .....	113
4.2. The subcorpus CHaRLi .....	115
4.2.1. Corpus composition.....	118

4.2.2. Size of the corpus and period division.....	125
4.2.3. Description of some manuscripts and editions .....	128
4.2.4. Annotation .....	130
4.2.5. List of relevant factors investigated.....	131
4.2.6. Types of construction .....	132
4.3. Metadata .....	134
4.4. Visualisation .....	135
4.5. Secondary sources .....	136
4.6. General means of corpus analysis .....	140
5. Results of Corpus Analysis .....	144
5.1. Distributional analysis.....	144
5.2. Frequency distribution of PiCs in the Old and Middle Russian periods .....	152
5.2.1. Temporal trends in the distribution of NPiCs and APiCs.....	162
5.2.2. Distribution of primary constructions and their variants according to word order	166
5.3. The relation between the choice of construction and two factors: Dative subject and word order for PiCs and SeCs.....	169
5.4. The relation between the choice of construction and two factors for PiCs and SeCs in hybrid texts	180
5.5. The rise of secondary constructions .....	193
5.6. Multivariate analysis.....	202
5.7. Qualitative analysis.....	212
5.7.1. Selectional restrictions for the NP.....	212
5.7.2. Some notes on the dialectal use of NPiCs and APiCs .....	221
5.8. Specific cases and comments on different texts .....	226
5.9. Summary.....	236
6. Conclusions .....	240
APPENDIX: Examples and comments on the use of PiCs in selected texts.....	253
I. Hybrid texts.....	253
1. Voprošanie Kirikovo. (VK) [The Questions of Kirik] (Index 1.7 in Section 5.2)	253
2. Sudebnik 1497 goda. S. I. Štamm (Sud. St. 1497) [Code of Law of 1497].	254
3. Sudebnik (Sud.1550) of Ivan the Terrible (1550) .....	254
4. Lunnik. Primety po dnjam luny (Lun.) [Lunar calendar] .....	255
5. Domostroj (Dom.) [Domestic Order (book of moral codex)] .....	256
6. Stoglav (Stoglav) (The Book of One Hundred Chapters).....	256
7. Sobornoe Uloženie 1649 goda (Sob. Ul.) [Code of law of 1649] .....	257
8. Kniga o skudosti i bogatstve, I.T. Posoškov. (Pos.) [The book about poverty and wealth written by I.T. Pososhkov] .....	261
9. The examples from the Novgorod birch-bark letters and chronicles:.....	262

10. The use of PiCs in chronicles .....	263
II. Gramoty Velikogo Novgoroda i Pskova (GVNP) [Charters of Great Novgorod and Pskov] (1434-1471) .....	263
III. Examples of NPiCs from folklore texts .....	266
List of Tables and Figures .....	267
Bibliography .....	273
Declaration .....	285

## **Dedication**

*to my loving and inspiring grandmother, my “Babulja”*



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## List of Abbreviations

The following abbreviations have been used to label grammatical morphemes in the glosses in this dissertation.

1	first person
2	second person
3	third person
ACC	Accusative
AUX	auxiliary verb
CONJ	conjunction
COMP	complementizer
DAT	Dative
F	Feminine
GEN	Genitive
GER	gerund
IMP	Imperative
INS	Instrumental
INF	Infinitive
M	Masculine
MOD	modal word
N	neutrum
NOM	nominative case
P	person
PASS	Passive
PAST	Past
PL	Plural
POSS	Possessive
PRS	Present

PRT	Preterite
PTCP	Participle
REFL	Reflexive
SG	Singular
<b>Abbreviation (Theory)</b>	
CGA	Competing Grammar Approach
CGH	Competing Grammar Hypothesis
CHaRLi	sub corpus of RRuDi) diachronic corpus for Chancellery Russian Language
DatS	dative logical subject
EPP	Extended Projection Principle
GEO	location or name of the city
GLMM	generalized linear mixed-effects modelling
H	hybrid text
LFG	Lexical-Functional Grammar
LMM	linear mixed-effects modelling
NOR	Nominative Object Rule
NP	noun phrase
OBJ	object
POST	word order: post-verbal position of the object NP
PRE	word order: pre-verbal position of the object NP
RRuDi corpus	Regensburg Russian Diachronic corpus
RUS	Russian
ST	statutory text
SUBJ	subject
TP	tense phrase
VP	verbal phrase

## List of Transliteration

For scientific transliteration of Cyrillic signs, I used basically *CyrAcademisator-Online* transliteration tool for Russian and Old Church Slavonic texts, which is based on standard for scientific purposes transliteration styles (see more: <https://podolak.net/en/transliteration/old-church-slavonic>).

Cyrillic Character	International System
Аа	Aa
Бб	Bb
Вв	Vv
Гг	Gg
Дд	Dd
Ее	Ee
Ёё	Je je
Жж	Žž
Зз	Zz
Ии	Ii
Йй	Jj
Кк	Kk
Лл	Ll
Мм	Mm
Нн	Nn
Оо	Oo
Пп	Pp
Рр	Rr

Cc	Ss
Tt	Tt
Yy	Uu
Фф	Ff
Xx	Ch ch
Цц	Cc
Чч	Čč
Шш	Šš
Щщ	Šč šč
Юю	Ju ju
Яя	Ja ja
Ьь	'
Ъъ	Ъъ
Ыы	Yy
Ѣ ѣ	Ě ě
Ѧ, ѧ	Ja ja
Ѯ ѯ	Je je
Ѱ ѱ	Ė ė
Ѳ ѳ	Q q
Ѵ ѵ	Ję ję
Ѷ ѷ	Jq jq
Ѹ ѹ	F· f·
ѻ Ѽ	Ÿ ŷ

## Sources

Here have been summarised all abbreviations of the sources, which have been used in examples in this work and most of them were also included in the sub-corpus CHaRLi:

AARX	Akty sobrannye v bibliotekach i archivach Rossijskoj Imperii Archeografičeskoju ekspedicieju Imperatorskoj Akademii nauk, Tom 1, 1294-1598, Tipografija II otdelenija sobstvennoj E. I. V. Kanceljarii, Sankt-Peterburg, 1836, 546 stranic. (CHaRLi)
Akty ist.	Akty istoričeskie, sobrannye i izdannye archeografičeskoju kommissieju, Tom 1, 1334-1598, Sankt-Peterburg, 1841-1842, 614 stranic. (CHaRLi)
Akty jur.	Akty juridičeskie, ili sobranie form starinnago deloproizvodstva. Archeografičeskaja kommissija, Sankt-Peterburg 1838, 509 stranic. (CHaRLi)
AMG	Akty Moskovskogo gosudarstva, izdannye Imepratorskoju Akademieju nauk, Tom I, Razrjadnyj prikaz, Moskovskij stol, 1571 - 1634, red. N.A. Popov, 1890-1901, 802 stranicy. (CHaRLi)
ASZR	Akty, odnosjajščesja k istorii Zapadnoj Rossiji, Tom 1, 1494 - 1506, Nestor-Istorija, Moskva - Sankt-Peterburg, 2012, 664 stranicy. (CHaRLi)
Avvk.	Žizneopisanije Avvakuma (tekst). Red. A. Robinson Žizneopisanije Avvakuma i Epifanija. Moskva, 1963. S. 139-178. (CHaRLi)
Ber. gr.	Novgorodskie berestjanye gramoty ( <a href="http://gramoty.ru">http://gramoty.ru</a> )
DDG	Duchovnye i dogovornye gramoty Velikich i udel'nych knjazei, XIV-XVI vv. Red. L.Čerepnin, Moskva-Leningrad: AN SSR, 1950, 586 stranic. (CHaRLi)
Dog. gr. 1496	Dogovornaja Gramota (v kopii) Velikogo Knjazja Rjazanskogo Ivana Vasil'eviča s bratom ego rodnym Knjazem Feodorom Vasil'evičem: o bytii im i detjam ich v sojuze i družbe; o upravlennii každomu svoimi zemljami po učinennomu meždu imi razdelu, i ob otdače, v slučaje beznasledstvennoj ego Velikogo Knjazja končiny, Rjazanskogo Velikogo Knjaženija men'somu bratu Kn. Feodoru? O vedanii Ordy staršemu bratu, i o dače Kn. Feodoru dlja Ordynskogo vychoda dani; o rubeže, sudach, raspravach, mytach i pošlinach. - Pisana v Rjazani 19 Avg. 1496 goda. In: Sobranie gosudarstvennyh gramot i dogovorov, chranjašichsja v gosudarstvennoj kollegii inostrannyh del. Čast' pervaja. Tipografija N. S. Vsevoložskago, Moskva, 1813, str. 320 - 324 (CHaRLi)
Dog. gr. 1531	Dve dogovornye vzaimnye gramoty Gosudarja i Velikogo Knjazja Vasilija Ioannoviča, i syna ego Velikogo Knjazja Ivana Vasil'eviča, s bratom ego Knjazem Jur'em Ivanovičem: o bytii im v večnom sojuze i družbe; o izveščennii Gosudarja o vseh razglašenijach, kasajuščichsja do ego pribytku ili uščerba; o upravlennii každomu svoimi zemljami po učinennomu otcom ich razdelu, o nepokupke i nezakladyvanii s obeich storon vo vladenii drugogo votčiny; o vedanii Ordy Gosudarju, i o dače Knjazju Jur'ju dlja Ordynskogo pachoda dani; o sydach i raspravach - za podpisaniem Moskovskogo Mitropolita Daniila. - Pisany 24 avgusta 1531 goda.

	In:Sobranie gosudarstvennyh gramot i dogovorov, chranjaščichsja v gosudarstvennoj kollegii inostrannyh del. Čast' pervaja. Tipografija N. S. Vsevoložskago, Moskva 1813, str. 443-448. (CHaRLi)
Dog.gr. 1229	Torgovyj dogovor Smolenska s Rigoju i Gotskim beregom. In: Smolenskie gramoty XIII-XIV vekov. Moskva 1963. (KSDR)
Dom. Ja.	Domostroj, po rukopisjam imperatorskoj publichnoj biblioteki, ed. by V. Jakovlev. Sankt-Petersburg. (RRuDi)
Dom. K.	Domostroj po Konšinskemu spisku. Ed. A.S. Orlov, Moscow, 1908; reprinted The Hague, 1967.
Dom. Z.	Domostroj po spisku imperatorskogo obščestva istorii i drevnostej rossijskich, ed. By D.C.I.Zabelin, Moskva.
Dvin.	Issledovanija o dvinskich gramotach XV veka. Issledovanija po russkomu jazyku, ORJaS, 2.3. 1903.
Dvin. gr.	Dvinskie gramoty, In: A. A. Šachmatov: Issledovanie o Dvinskich gramotach XV v., Otdelenie russkago jazyka i slovesnosti Imperatorskoj Akademii Nauk, Sankt-Peterburg 1903, 339 stranic. (CHaRLi)
Gram. Šachm.	Issledovanija o jazyke novgorodskich gramot XIII i XIV veka. (Issledovanija po russkomu jazyku, ORJaS, 1, 131-285.)
GSZR	Gramoty, kasajušiesja do snošenij Severno-Zapadnoj Rossii s Rigoju i Ganzejskimi gorodami v XII, XIII i XIV veke. Sankt-Peterburg, 1857, 29 stranic. (CHaRLi)
GVNP	Gramoty Velikogo Novgoroda i Pskova. S.N. Valka. Moskva-Leningrad, Akademija nauk SSSR, 1949, 408 s. (CHaRLi)
Ipat. let.	Ipat'jevskaja letopis'. Polnoe sobranie russkich letopisej. Moskva, 1962. T.2.XVI c., 87 s.
KSDR	Kartoteka Slovarja Drevnerusskogo jazyka XI - XVII vv., Institut russkogo jazyka RAN, Moskva.
Lavr. let.	Lavrentjevskaja letopis' Polnoe sobranie russkich letopisej. Moskva, 1962. T.1.XVI c., 1-488 s.
Lun.	Lunnik. Primety po dnjam luny. In Živaja starina. № 3. Peterburg, 1891. 5 stranic. (CHaRLi)
Mor.	Akty chozjajstva bojarina B. I. Morozova, red.A. I. Jakovlev: Čast' II, Izdatel'stvo Akademii Nauk SSSR, Moskva, Leningrad 1945, 209 stranic. (CHaRLi)
NKRJ	Nacionalnyj Korpus Russkogo Jazyka ( <a href="http://ruscorpora.ru">http://ruscorpora.ru</a> )
Novg. let.	Novgorodskaja pervaja letopis' staršego izvoda. Sinodal'nyj spisok. In: Polnoe sobranie russkich letopisej. Volume 3: Novgorodskaja Pervaja Letopis' staršego i mladšego izvodov, Moskva, 2000, stranicy 13 - 100.
NSG	Novgorodskaja sudnaja gramota (aus AARX N 92. —1471 August). (CHaRLi)
OKB	Otkaznye knigi. Pamjatniki Južnovelikoruskogo narečija. Red. S.I. Kotkov, N.S. Kotkova, Moskva, 1977, 360 s. (CHaRLi)
PDSK	Pamjatniki diplomatičeskich snošenij moskovskago gosudarstva s Krymom, Nagajami i Turcieju, ed.G. F. Karpov, G. F. Štendman: Tom II, 1508 - 1521,



	Tovariščestvo „Pečatnja S. P. Jakovleva“. Nevskij prosp., d. No. 132, Sankt-Peterburg, 1895, 786 stranic. (CHaRLi)
PDSK	Pamjatniki diplomatskich snošenij moskovskago gosudarstva s Krymom, Nagajcami i Turcieju, ed. G. F. Karpov, G. F. Štendman: Tom II, 1508 – 1521, Tovariščestvo „Pečatnja S. P. Jakovleva“. Nevskij prosp., d. No. 132, Sankt-Peterburg, 1895, 786 stranic. (CHaRLi)
Pos.	Kniga o skudosti i bogatstve, ed. I.T. Posoškov. Gosudarstvennoe social'no-ekonomičeskoe izdatel'stvo, Moskva, 1937, 354 stranicy. (CHaRLi)
PR, 1503	Pryvilej Vicebskaj zjamli, 1503 g. In: Akty Zapadnoj Rossiji, T.1: 1340-1506, Sankt-Peterburg, 1846. (CHaRLi)
PSG	Pskovskaja Sudnaja Gramota (1397-1467), I. Vasilev, N. Kirpičnikov, Izdanie Pskovskago Archeologičeskago obščestva, Tipografija Gubernskago Pravlenija, Pskov 1896, 75 stranic. (CHaRLi)
RLA	Russko-Livonskie Akty, (1189-1299, 1404-1587, 1603) izdanie archeografičeskoj kommissii, tipografija imperatorskoj akademii nauk, Sankt-Peterburg 1868, 675 stranic. (CHaRLi)
Roz.	Ukrains'ki gramoti, Tom pervij: XIV v. perša polovina XV v., ed. V. Rozov, Kiev, 1928.
RP	Russkaja pravda. In: E.F. Karskij (ed.) (1930): Russkaja pravda po drevnejšemu spisku. Leningrad: Izdatel'stvo Akademii nauk.
RP sinod.	Russkaja Pravda, sinodalnyj spisok, 119-33.
RP Troick. sp.	Russkaja pravda, prostrannaja redakcija po Troickomu spisku vtoroj pol. XV
RRuDi corpus	Regensburg Russian Diachronic Corpus ( <a href="http://rhssl1.uni-regensburg.de:8888/Annis-web/login.html">http://rhssl1.uni-regensburg.de:8888/Annis-web/login.html</a> )
Rus. posl.	Russkie narodnye poslovice i pritči. ed. Snegirev, I. Moskva: Insitut russkoj civilizaciji. 2014.
SGGrD	Sobranie gosudarstvennyh gramot i dogovorov, chranjaščichsja v gosudarstvennoj kollegii inostrannyh del. T.1. Tipografija N. S. Vsevoložskago, Moskva 1813, 689 stranic. (ChaRLi)
Sob.Ul.	Sobornoe Uloženie 1649 goda. A. G. Man'kov: Rossijskoe zakonodatel'stvo X-XX vekov, Akty zemskich soborov, Tom 3, Izdatel'stvo „Juridičeskaja literatura“, Moskva, 1985, 512 s. (ChaRLi)
Stoglav	Stoglav, 1550, Tipografija Gubernskogo Pravlenija, Kazan', 1862. 454 stranicy (ChaRLi)
Sud. 1550	Zakony velikago Knjazja Ioanna Vasilieviča i Sudebnik Carja i Velikago Knjazja Ioanna Vasilieviča s dopolnitel'nymi ukazami. Izdanie Kommissii pečatanija gosudarstvennyh gramot i dogovorov, sostojašej pri moskovskom glavnom archive ministerstva inostrannyh del, v sinodal'noj tipografii, Moskva 1878, 112 stranic.( N 57, 78, 84, 99) (ChaRLi)
Sud. 1497	Kn.Vs. Sudebnik Velikago Knjazja Ioanna Vasil'eviča. In: Akty istoričeskie, sobrannye i izdannye archeografičeskoju kommissieju, 105. – 1497 Sentjabrja. Tom pervyj, 1334-1598, Tipografija zagotovlenija Gosudarstvennyh bumag, Sankt- Peterburg 1841, 614 stranic. (ChaRLi)

Sud. St. 1497	Sudebnik 1497 goda. S. I. Štamm: Sudebnik 1497 goda, Gosudarstvennoe izdatel'stvo Juridičeskoj Literatury, Moskva 1955, 112 stranic. (ChRLi)
Suz.let.	Suzdal'skaja letopis' po akademičeskemu spisku. Polnoe sobranie russkich letopisej. Moskva, 1962. T.1. 489-540.
Ust. gr.	Ustavnaja gramota Velikogo Knjazja Vasilija Dmitrijeviča i Mitropolita Kipriana, o cerkovnych sudach, rasporjadkach i pošlinach v volostjach, prinadležašich duchovnomu vedomstvu, (1389-1403). In: Akty, sobrannye v bibliotekach i archivach Rossijskoj imperii Archeografičeskoj ekspediceju imp. Akademiji nauk, T. 1, № 9. SPB, 1838. (ChRLi)
Ustav Stud. Vesti K.	Ustav Studijskij cerkovnyj i monastyrskij. GIM., Sin. 330. 281 s. (CHaRLi) Vesti-Kuranty, 1600-1639. Izd. podgotov. N.I. Tarabasova, V.G. Dem'janov, A.I. Sumkina, Moskva, 1972, 348 stranic (RRuDi)
VK	Voprošanie Kirikovo. Se est' prošanie Kirikovo, eže veprašā episkopa nougorod'skago Nifonta i inych. Pamjatniki drevne-russkago kanoničeskago prava, Čast' pervaja, Napečatano po rasporjaženiju Archeografičeskoj Kommissii Ministerstva Narodnago Prosveščeniija, Tipografija Imperatorskoj Akademii Nauk, Sankt-Peterburg 1880, 681 stranic. (ChRLi)
Vvoz. gr.	Vvoznaja gramota voevody kn. Vasilija Ivanoviča Bujnosova Rostovskogo i d'jaka Neljuba Sukolenova Ivanu Michajlovu synu Aničkova na pust. Mosylino (Sopki), Rataevo i dr. v Demanskom pogoste Derevskoj pjatiny. In: Novye dokumenty po istorii novgorodskoj i pskovskoj slyžilych korporacij XVI - načala XVII veka. Russkij diplomatarij, Vyp. 5. Moskva. Archeografičeskij centr. 1999. (CHaRLi)
Zad.	Zadonščina. In: Pavel Simoni (ed.) (1922): Zadonščina po spiskam XV–XVIII stolětij. Vypusk III. In the series Pamjatniki starinnago russkago jazyka i slovesnosti. Petrograd: Rossijskaja gosudarstvennaja akademičeskaja tipografija.
Žal. gr.	Žalovannaja (podtverditel'naja) ustavnaja namestnič'ja gramota c. Ivana Vasil'eviča ryl'skim detjam bojarskim, sevrjukam, posadskim ljudjam i krest'janam, s podtverždeniem Ivana Vasil'eviča. Ok. 1552 (?) g. In: Russkij diplomatarij, Vyp. 3., Moskva 1998. 3-6 stranicy. (CHaRLi)
ZSL	Zakon sudnyj ljudem prostrannoju i svobodnoj redakcii. Ed. M.N. Tichomirov, Moskva, 1961.
ZSL l.	Zakon sudnyj ljudem prostrannoju i svodnoj redakcii. M. Tichomirov, L. Milov, Moskva, 1961. 288 s.
ZSL s.	Zakon sudnyj ljudem kratkoj redakcii. M. Tichomirov, L. Milov, Moskva, 1961. 180 s.

# 1. Introduction

## 1.1. Main objectives

In the past decades, Slavic grammaticalization research and typological linguistics have frequently addressed issues of noncanonical nominative object marking, as attested in various periods in the history of Russian and other Slavonic languages. From a diachronic perspective, the fundamental questions that arise concerning nominative object constructions are (cf., e.g., Timberlake 1974; Babby 1991; Ambrazas 2001; Mendoza 2008, Seržant 2016):

1. the mechanism for case marking,
2. the development of subject and object features in these constructions,
3. their origin and how they spread, and,
4. the role of areal factors and changes in other grammatical categories in their development.

The research project “Corpus Linguistics and Diachronic Syntax II: Subject Case, Finiteness and Agreement in Slavonic Languages”<sup>1</sup>, led by Prof. Dr. Roland Meyer, Prof. Dr. Björn Hansen and Prof. Dr. Ernst Hansack and sponsored by the German Research Foundation, tied up with this research. Its goal was to clarify unresolved issues by using corpus-linguistic methods, with special focus on the relationship of the notion of “subject” and case assignment strategies in various Slavonic languages. For this purpose, selected constructions<sup>2</sup> were analyzed based on data from diachronic Slavonic corpora, and investigated by using modern corpus linguistic quantitative techniques.

The present research was conducted within the framework of this project and investigates noncanonical object marking in so-called *nominative object constructions* in the history of Russian. The nominative object is one of the syntactic features common in various East Slavic as well as contiguous East Baltic dialects and Western Finnic. In these languages,

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<sup>1</sup> The mentioned project (DFG HA-2659 1-2) is the follow-up project of the German Research Foundation project [German: Deutsche Forschungsgemeinschaft – DFG] “Corpus Linguistics and Diachronic Syntax I: The Grammaticalization of Non-Canonical Subjects in Slavonic Languages” lead by Prof. Dr. Björn Hansen and Prof. Dr. Ernst Hansack (University of Regensburg). For more information about the project, see: <https://www.slavistik.hu-berlin.de/de/member/meyerrol/subjekte>. See also Meyer (2012) for details on the structure, coding workflow, and a proper exploitation of the diachronic Russian and Polish corpora (RRuDi: <http://www-slavistik.uni-r.de/rrudi> and PolDi under: <http://www-slavistik.uni-r.de/poldi>).

<sup>2</sup> In the following, the term “construction” is used to refer to form–meaning pairings (patterns) at different levels of abstraction (cf. Timberlake 1974).

an impersonal, subjectless, sentence may contain an infinitive or gerund governing a nominative patient argument. All types of these syntactically identical structures share the same modal semantics of “(deontic) necessity”. The term *nominative object construction*<sup>3</sup> (Rus.: *konstrukcija s imenitel’nym objekta*) (from now on NOC) serves as a helpful cover term when comparing similar yet diverging sentence types in different languages and dialects. Therefore, it will also be used throughout this book despite reservations regarding its adequacy arising in the discussion on the syntactic status of the nominative patients argument. In the context of this study, it is an umbrella term for different constructional types that will be introduced and classified in detail in (cf. discussion in Chapter 2).

From a diachronic perspective, the following fundamental issues concerning NOC have so far been discussed in research:

- the origin, development and distribution of the construction and its equivalents in modern dialects and in the history of Russian;
- the mechanism of case licensing and the development of the syntactic status of the nominative or accusative argument as either subject or object;
- the role of external linguistic factors (e.g., register variation, areal factors) and developments of other grammatical categories and constructions in the variation and change of the construction in focus.

The present study combines these research strands when it focuses on the description of case variation (nominative vs. accusative) in NOC. The accusative variant (from now I shall call it AOC) increased in frequency especially in the later Middle Russian period (from the 16<sup>th</sup> century) until it replaced the nominative in written registers, and the nominative variant became a dialectal feature. The corpus linguistic analysis presented in this book (cf. Chapter 5) will help to shed light on this development as well as on factors determining case choice. This is of relevance, because the use of the two variants (NOC vs. AOC) was often explained as “free variation” with random case choice.

The main proposal of the book is that the observed case variation is an instance of “stable variation” as defined in the Competing Grammar Framework (Kroch 1989), that is, an

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<sup>3</sup> In Russian historical works, one often finds other terms like (Rus.: *infinitivnyj oborot “zemlja pachat”* ‘infinitival phrase ‘the land to plow’), Rus.: *imenitel’nyj priinfinitivnyj v objektnom značeniji* ‘nominative with infinitive in object meaning’), but NOC is more flexible.

optionality caused by the subspecification or specialization of forms throughout time. Variation in case assignment in the constructions in focus is then the result of the overlap of two original rules (and not grammars) in the same pattern with different initial nodes, which competed throughout the complete history of their existence in the history of Russian.

## 1.2. The constructions and research questions in focus

The following prototypical examples from Old Russian (1) and Middle Russian sources (2) illustrate NOCs with nominative patients arguments. The use of the accusative variant (= AOC) is demonstrated in example (3).

- (1) Ber. gr. N.10, late 12<sup>th</sup> c.:

<i>Vъ</i>	<i>volosti</i>	<i>tvoej</i>	<i>toliko</i>	<i>voda</i>	<i>piti</i>	<i>v</i>	<i>Gorodišnjach</i>
in	property	yours	only	water	-to-drink - INF	in	Gorodišč
				NOM.F.SG			

In Gorodišč, in your property, one is to drink only water. '

- (2) OKB, Belgorod, N.9 17<sup>th</sup> c.:

<i>A</i>	<i>zemlja</i>	<i>emu</i>	<i>Timofeju</i>	<i>pachat'</i>
and	land - NOM.F.SG	to him – DAT	Timofei - DAT	to-plow - INF

'It is necessary for Timofej to plow this land.'

- (3) Stoglav, 16<sup>th</sup> c.:

<i>Potomu</i>	<i>že</i>	<i>i</i>	<i>upravu</i>	<i>učiniti</i>
According	that	and	justice - ACC.F.SG	to-do – INF

'According to this [writ] it is necessary to do justice'

The first peculiarity of sentences (1) and (2) in comparison to (3) is the fact that the nominative nouns (NOM) (*voda* 'water-NOM-arg' and *zemlja* 'land-NOM-arg') both express the PATIENTS of the infinitive verbs (*piti* 'drink' and *pachat'* 'plow'). Canonically, they should therefore be marked in accusative case (later ACC) as in (3) (*upravu* 'justice-ACC-arg'). Otherwise, the infinitive verb would be expected to be either reflexive (with the reflexive pronoun *-sja*: *zemlja*

*pachat'sja* ‘the land plows itself’) or in the passive voice (*zemlja vspachana* ‘the land is ploughed’).

The second peculiarity is that constructions like (1) and (2) may contain an optional logical subject expressing the agent of the action marked in the dative case (DAT) as in (2). In such cases, the necessity to perform the action expressed by the infinitive verb (*pachat* ‘to plow’) is assigned to an agent (*emu Timofeju* ‘to him Timofej’-DAT-arg). In sentences without a logical DAT like (1), the sentence has a generic reading, assigning the necessity to ‘all of you/us’.

A third peculiarity is that, throughout the whole history of NOC in written Old and Middle Russian, the NOM and the ACC cases alternate, even in those dialects in which nominative case marking appears to be the regular case, as in the Old North Russian dialects. This case variation does not show complementary distribution, neither does it seem completely unmotivated or random.

Sentences of types (1) and (2) have been attested frequently in Old and Middle Russian texts; they were particularly frequent in the Old North Russian dialects and still survive in certain modern dialects. Some rare examples have also been found in Old Ukrainian texts from the 14<sup>th</sup> and 15<sup>th</sup> centuries, as well as in Belarusian texts from the 16<sup>th</sup> and 17<sup>th</sup> centuries. Although NOCs have been investigated thoroughly in the historical syntax and dialectology of Russian, scholars have not reached a consensus regarding the mechanism of case marking and the object or subject status of the nominative noun phrase (later NOM-arg). Some scholars (Potebnja 1958; Borkovskij 1949; Stepanov 1984; Kryś’ko 1994; Jung 2010) consider constructions like (1) and (2) as having Indo-European heritage and argue that the NOM-arg indicates a former subject whereas the infinitive verb originates from the purposive dative of a verbal noun. Another theory, suggested by Timberlake (1974: 200–204), explains the use and origin of the NOCs in Old North Russian as a contact-induced phenomenon, that is, as a “syntactic borrowing” from a West Finnic language. Moreover, arguing that case licensing in Russian does not sufficiently indicate the object or subject status of the argument, Timberlake (1974) favors the object status of the nominative. An alternative explanation was suggested in the typological work of Ambrazas (2001). According to him, these diverging interpretations of the development and origin of NOCs in Russian can be “regarded as complementary” (Ambrazas 2001: 408) and apply to different periods. Notwithstanding all these explanations, the characteristics of the noncanonical object have not been described adequately, and a convincing explanation for the alternation of NOM and ACC licensing has not yet been proposed.

First and foremost, this book contributes to the debate on the syntactic status of the nominative argument as suggested by previous syntactic and philological studies on this phenomenon. A special focus is the fact that, besides types (1) and (2), other, almost parallel constructions with canonical (accusative) object marking existed during the Old and especially the early and later Middle Russian periods (cf. Chapter 2.2). Investigating their distribution and development over time provides deeper insights into the unresolved issues of variation in case licensing. For this purpose, constructions with alternative accusative case marking are included in the analysis. Thus, the main goal of the present study is to investigate the variation in case marking with a noncanonical nominative versus a canonical accusative in constructions like those in (1) and (2) versus (3). It also clarifies the mechanism of case licensing and the characteristics of noncanonical subjects and objects in the history of Russian. Based on a corpus of Old and Middle Russian chancellery language, the study provides a multifactorial diachronic analysis in order to detect the linguistic and extralinguistic factors (such as dialectal or register variation) that trigger this type of case variation. Furthermore, it aims to reconstruct the microshifts in the case-assignment strategies in different types of such constructions (cf. Chapter 5) and determine the temporal stages in which this development took place. A systematic investigation of the construction's morphosyntactic and semantic development sheds light on the relation between the notion of subject and object and their properties as well as on the noncanonical case- assignment mechanism from a diachronic perspective. This study assumes that several constructional changes interact with the diachronic development of canonical and noncanonical object marking. It argues that the most obvious change affecting noncanonical object marking pertains to the constructional schema itself.

This study essentially reflects two ideas: The first one, proposed by Dunn (1978), is that case alternation in the history of Russian can be interpreted as a tendency rather than a rule-driven process. The second idea was proposed under the Competing Grammar Approach for the analysis of historical language change. The so-called competing grammar hypothesis (e.g., Kroch 1989) argues that syntactic change proceeds due to a competition between grammatical rules or options. To understand why one of these rules wins over the other(s), it is necessary to consider linguistic and nonlinguistic factors. This book combines these ideas and uses them within the traditional approach (cf. Potebnja 1888, 1958; Popov 1881; Šachmatov 1903, 1925; Borkovskij 1944; Isačenko 1967; Stepanov 1984; Krys'ko 1994, 2006; etc.) for explaining nominative versus. accusative case alternation in NOCs. It develops an extended model of the mechanism of case assignment in NOCs from a diachronic perspective. This methodological

framework necessarily accounts for theories on language variation. Essentially, I propose the following explanation for case variation in NOC and AOC constructions: the variation between the two main structural variants (the NOC and the AOC constructions) and their subvariants (secondary constructions) in Russian is a case of competing grammars in the sense of Kroch (1994). That means that the gradual rise of the NOC construction in Old and Middle Russian until the 15<sup>th</sup> century (and its active use until the 18<sup>th</sup> c.) as well as its alternation with the AOC construction reflects the competition between different rules. This situation leads to stable variation and partial overlaps of nominative and accusative within the same sentence. “Stable variation” refers to an optionality caused by subspecification or specialization of forms over a continuous period.

### **1.3. Outline of the book**

Noncanonical nominative object marking is attested in different syntactic environments in Old and Middle Russian. Chapter 2 introduces these environments and thereby provides the theoretical and terminological basis for this study. The next topic addressed is the problem of noncanonical subject and object marking as a general issue of linguistics. Then, the phenomenon of noncanonical nominative object marking in the Russian language is presented in detail, pointing out its distribution in general, the morphosyntactic and lexical properties of the construction and its restrictions. Finally, for preparatory purposes with respect to the subsequent investigation, the Middle Russian period (15<sup>th</sup> to 17<sup>th</sup> c.) and its language varieties are discussed.

Chapter 3 outlines the theoretical background of recent linguistic studies on the noncanonical case marking of subjects and objects in general. Then, a review of previous studies on the phenomenon of nominative object marking in Russian particularly concentrates on various interpretations of the origin and status of the NOM-arg in NOCs. Two controversial approaches, the so-called “traditional approach” and “Timberlake’s approach”, will be discussed together with some recent theories proposed within the Minimalist framework. This chapter provides the basis for the subsequent empirical corpus investigation and its linguistic analysis by revealing which theoretical gaps require more detailed consideration. It also discusses the difficulty of making inter- and crosslinguistic generalizations regarding the mechanism of case marking and the degrees of subjecthood and objecthood from a diachronic perspective. Subsequently, studies on case variation (NOM-arg vs. ACC-args) in the respective potential



NOC sentences will be discussed, including – finally – the Competing Grammar Approach as an alternative framework.

Chapter 4 presents the methods and the linguistic data used for the qualitative and quantitative analysis. It gives a detailed description of the composition and implementation of the corpus for the chancellery language of Old and Middle Russian (CHaRLi).

Chapter 5 explains the methodological steps for the evaluation of the corpus data and discusses the results of the quantitative and the qualitative analysis.

Finally, Chapter 6 provides the conclusion and an outlook. It proposes an alternative model that explains case variation in potential NOCs within the framework of the Competing Grammar Approach.

## 2. Fundamentals: The construction and language varieties being researched

### 2.1. General characteristics of Nominative Object Constructions (NOCs)

The following sentences from Old Russian (4 and 5) and Middle Russian (6) illustrate prototypical examples for NOCs:

(4) GVNP, N.3, 1270:

<i>a</i>	<i>ta</i>		<i>gramota</i>	<i>knže</i>	<i>dati</i>	<i>ti</i>	<i>nazadъ</i>
and	this	-	writ-	prince- VOC	to-give	-you	-back
	NOM.F.SG		NOM.F.SG		INF	DAT	

‘and this writ is necessary for you, prince, to give back’

(5) RP, Troick. spisok, second half of the 14<sup>th</sup> c.:

<i>A</i>	<i>platiti</i>		<i>emu</i>	<i>grivna</i>	<i>za</i>	<i>muku</i>
And	to-pay – INF		to him	-grivna - NOM.F.SG	for	flour
			DAT			

‘And he has to pay a grivna for the flour’

(6) Vvoz. gr., 1603

<i>A</i>	<i>Ivanu</i>	<i>Oničkovu</i>	<i>togo</i>	<i>pomest’ja</i>	<i>gosudareva</i>	<i>služba</i>	<i>služit’</i>
and	Ivan	Onichkov -DAT	from	village	state-	service-	to-serve-
		this			NOM.F.SG	NOM.F.SG	INF

‘And it is for Ivan Onichkov from this village to perform a state service’

These examples are considered prototypical because they are infinitive sentences with three characteristic properties: First, they contain a noun in NOM in the object position (*ta gramota* ‘this writ’ (4); *grivna* ‘grivna’ (currency) (5); *gosudareva služba* ‘state service’ (6)) that either precedes an infinitive verb as in (4) and (6) or follows the infinitive as in (5). Second, they express a modal meaning of ‘necessity’ or ‘obligation’ (‘sth. needs to be done’). Third, they contain an optional dative subject (DAT-subj) expressing the agent of the verbal act, i.e. *knže*

‘prince’ in (4), *emu* ‘him’ in (5), and *Ivanu Oničkovu* ‘for Ivan Onichkov’ in (6), whereas the absence of a DAT-subj in (1)<sup>4</sup> implies a generic reading in which the necessity is assigned to ‘all of you/us’.

Thus, these sentences show a mismatch of (canonical) form and function and have a very specific semantic and pragmatic profile. In a nutshell, NOCs are characterized by:

- 1) the ability to determine NOM for the noun in the object position expressing the semantic role of patients (PAT).
- 2) the absence of agreement between the predicate and the NOM-arg.
- 3) a relatively robust word order with the NOM-arg generally preceding the infinitive verb.
- 4) an optional noncanonical DAT-subj that expresses the semantic role of a canonical subject, that is, the addressee or potential agent, without agreeing with the predicate grammatically.
- 5) a noncompositionally derived modal meaning of “deontic necessity”.

Because of the missing verb agreement and the observable case variation (NOM vs. ACC), the NOM-arg of the infinitive is held to have the status of the grammatical object. Therefore, most theories call this argument the “nominative object” (NOM-arg) and analyze the phenomenon as a *case of non-canonical object marking*. As mentioned in Chapter 1, other parallel syntactic environments exist in Old and Middle Russian, which also contain a so-called NOM-arg of the infinitive or finite verb and share the modal semantics of “deontic necessity” (e.g., Timberlake 1974; Ambrazas 2001; etc.). Often, the term “NOC” is used as an umbrella term for these structures, with the concept of “construction” referring to the phrasal grammatical pattern of sentences such as (1), (2) and (4) to (6). I adopt this term from modern theoretical works on this type of syntactic construction in Russian (cf. Timberlake 1974; Ambrazas 2001; etc.) so that by using the term “NOC(s)”, I refer to all types and subtypes of sentences containing a so-called NOM-arg and expressing the modal semantics of “(deontic) necessity”.

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<sup>4</sup> Cf. page 18.

### 2.1.1. Semantic aspects of NOCs

The shared modal meaning of “deontic necessity” derives from a circumstantial necessity and/or a necessity due to a set of laws, rules, and traditions. The constructions therefore express that an agent is obliged to do or prohibited from doing something.<sup>5</sup> The main verb is dynamic, that is, the action can be controlled, and the subject that is to perform the action is human (Biber 1999: 485). In the case of NOCs, the subject is often expressed by a DAT. Deontic modality includes various submeanings:

- 1) (deontic) necessity (obligation) as in (4) to (6) and (10), (12).
- 2) (deontic) possibility (permission to do something) as in (7), (8), (9)
- 3) an imperative meaning as in (20), (21).
- 4) a promise or the announcement of a planned undertaking as in (22).

The examples below show that all these meanings can be found in Russian NOCs. In the development of these constructions, however, several shifts in the modal semantics can be observed. These shifts indicate a process grammaticalization of various grammatical categories that is still traceable in the later use of NOCs in the 16<sup>th</sup>–17<sup>th</sup> c. and especially in modern dialects (cf. e.g. Jung 2010). This book will contribute further details to this issue in Chapter 5.7.2.

### 2.1.2. Realizations and subtypes of NOCs

Hereinafter, I give an overview of all the types and subtypes of NOCs known in Old and Middle Russian and partly also in modern dialects. Constructions with an ACC-arg are included for comparison.

**A. PiCs:** Prototypical examples with NOM-arg, an independent infinitive and an optional DAT-subj (as in (4) – (6), and (1), (2) from Chapter 2) will, from now on, be referred to as “**Primary Constructions**” (PiCs).

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<sup>5</sup> A similar classification could be found in Kryśko & Yazhinova (2020).

**B. SeCs:** Constructions with a NOM-arg that share some structural and semantical properties with the PiCs but occur with a dependent infinitive or finite verb governed by various matrix elements, will be called “**Secondary Constructions**” (SeCs). SeCs were particularly frequent in the later Middle Russian period (15<sup>th</sup> – 17<sup>th</sup> c.) and are still used in some modern Russian dialects. SeCs are further divided into three subgroups:

**B.1. SeCs-1:** The first group (SeCs-1) contains a NOM-arg and an infinitive governed by a matrix element. Several subtypes of matrix element occur:

**a) an impersonal modal predicate either in finite or infinite verbal or in adverbial form,** e.g. *dostoit* ‘it is fit’ (7), *dostoino* ‘it is fitting’, *podobaet* (*podobat*) ‘it is befitting’ (8), *možno* (*mošno*, *močno*, etc.) ‘possibly’ (9), (*po*)*veleno* (*veleti*) ‘it is ordered’ (10), *vol’no* ‘it is free’ (11), *nadobno* (*nadobně*, *nužno*) ‘it is necessary’ (12).

(7) Miljatino evangelie, 1215; cited in Filin 1972: 483:

<i>dostoit’</i>	<i>li</i>	<i>mužu</i>	<i>žena</i>	<i>pustiti</i>
fitting - 3.SG	COND	husband- DAT.M.SG.	wife - NOM.F.SG	to-let - INF

‘Does it fit a husband to let go his wife?’

(8) Sob.Ul., 17<sup>th</sup> c.:

<i>I</i>	<i>pravoslavnym</i>	<i>christijanom</i>	<i>podobaet</i>	<i>v cerkvi</i>
and	orthodox	Christians	be fit – MOD	in church
<i>božii</i>	<i>stojati</i>	<i>i molitisja</i>	<i>so strachom,</i>	<i>a ne</i>
God	stand	and pray	with fear,	and not
<i>zemnaja</i>	<i>mysliti</i>			
earthly - NOM.F.SG	to-think - INF			

‘It befits orthodox Christians in the church of God to stand and to pray with fear and not to think about anything earthly’

(9) Sob.Ul., 17<sup>th</sup> c.:

<i>i</i>	<i>gosudareva</i>	<i>služba</i>	<i>im</i>	<i>po razboru</i>
and	state - NOM.F.SG	service NOM.F.SG	- they-DAT	in

*služiti*                      *mošno*

to-serve-INF      possible-MOD

‘and it is possible for them to perform the state service’

(10) GSZR, N.399, 1601:

*i naša carskaja žalovanaja gramota*

and our - NOM.F.SG imperial - request - writ - NOM.F.SG  
NOM.F.SG NOM.F.SG

<i>veleti</i>	<i>imъ</i>	<i>dati</i>
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order – MOD                      they - DAT                      to-give - INF

‘and our imperial writ of request [is that] it is necessary to order them to serve’

(11) PSG, 1397-1467:

*Ino                      ta                      stroka                      vol'no                      vypisat'*

then      this - NOM.F.SG      line - NOM.F.SG      free - MOD      to-strike out - inf.

*iz* *gramot*

from                      writs

‘then he is free to strike that article out of the writs’

(12) Pos., 17<sup>th</sup> c.:

*to                      sudye                      pri                      sebe                      nadobno*

and judge - DAT with him - REFL necessary - MOD

*deržat'                      ta                      zapiska*

to-keep – INF            this - NOM.F.SG    note - NOM.F.SG

‘And it is necessary for the judge to keep this note with him’

**b) an impersonal verb**, e.g. *lučitsja* ‘it happened’ (13), *dovedetsja* (*dovestisja*) ‘to have an occasion’, etc.

(13) Akty istor., no. 152, 1549 cited by Timberlake 1974: 15:

*Ili gde imo lučitsja ta sol' prodat'*

or where	they	–	to-turn	-	this-	salt-	to-sell	-
	DAT		INF		NOM.F.SG	NOM.F.SG	INF	

‘or wherever it turns out best for them to sell that salt’

**B.2. SeCs-2:** Examples of the second group (**SeCs-2**) contain a finite verb plus a NOM-arg either without a matrix element or with a gerund, passive participle or imperative verb as matrix elements. SeCs-2 have been founded in texts dated as early as the beginning of the 14<sup>th</sup> c. (e.g. Borkovskij 1949: 348).

**a) SeCs-2 with a finite verb in the past** (e.g., *čistil* ‘he cleaned’ that governs the NOM-arg *ta zemlja* ‘this land’ (14)), **future or present tense** (e.g., *črěpljutъ* ‘he/she/it draws’ with the NOM-arg *rivifnaja oucha* ‘pea soup’ (15)):

(14) Mor, 16<sup>th</sup> c:

<i>A</i>	<i>ta</i>	<i>zemlja</i>		<i>čistil</i>		<i>Ivan Brylkin</i>
and	this	-	land	-	to-clean-PAST.2.SG	Ivan Brylkin
NOM.F.SG			NOM.F.SG			

‘and this land must be cleaned by Ivan Brylkin’

(15) Ustav Stud., 12<sup>th</sup> c., cited in Iščenko, 1967: 199, translated by Timberlake (1974: 44):

<i>vina</i>		<i>že</i>		<i>vsej</i>		<i>toj</i>		<i>nedjeli</i>	<i>ni</i>
wine-		That		whole		that		week	not
GEN.N.SG									
<i>edinomu</i>		<i>pričyastiti sja</i>		<i>ne</i>	<i>dostoitъ.</i>	<i>Nъ</i>		<i>въ</i>	<i>nego</i>
single	-	partake		not	fitting - MOD	but		in	his
DAT									
<i>město</i>		<i>črěpljutъ</i>		<i>mъnichomъ</i>		<i>rivifnaja oucha.</i>			
place		draw - PRS.3.PL	monks			pea soup - NOM.F.SG			

‘It is not fitting for one to partake of wine for the whole week, but in place of that they draw off for the monks’ pea soup’

**b) SeCs-2 with a gerund as a matrix element:** In the following examples, the gerunds in the past (*otoslavъ* ‘have been sent’ in (16) or *davši* ‘was given’ in (17)) are both subordinated to infinitives (*ne voevatisja* ‘not be flighted’ in (16), *vzjatъ* ‘to take’ in (17)) and both have a

NOM-arg (*gramota* (16) and *pravda* ‘oath’ (17)). Also, one finds examples with adverbial gerunds (Rus.: *dejepričastije*) plus NOM-arg as in (18): *soimja* ‘taking off’ is a gerund form in the present tense, its NOM-arg is *rubáška* ‘shirt’ which is subordinated to the infinitive verb *biti* ‘to hit’.

(16) GVNP, N.70:

<i>i</i>	<i>gramota</i>	<i>otoslavъ</i>	<i>a</i>	<i>poslē</i>	<i>gramoty</i>	<i>mjesjčъ</i>	<i>ne</i>	<i>voevatisja</i>
and	writ	- send-	and	after	writs	month	not	fight - INF
	NOM.F.SG	GER.PAST						

‘and after the legal writ has been sent [for] one month [there] should not be war’

(17) PSG, 1397–1467 cited in Timberlake 1974: 26:

<i>ino</i>	<i>gosudarju</i>	<i>pravda</i>	<i>davši</i>	<i>vzjat’</i>	<i>svoje</i>
so	lord – DAT	oath	- have-	- to-take-INF	own - REFL
		NOM.F.SG	GER.PAST		

‘so it is for the lord to take what is his, having an oath’

(18) Dom. Ja, p. 100, 16<sup>th</sup> c. this example cited by Timberlake 1974: 26:

<i>Ino</i>	<i>soimja</i>	<i>i</i>	<i>rubáška</i>	<i>pletiju</i>
for	take-off-GER.PRS	and	shirt - NOM.F.SG	lash
<i>vežlivenko</i>	<i>biti,</i>	<i>za</i>	<i>ruki</i>	<i>derža</i>
carefully	to-beat - INF	by	hand	hold - GER.PRS

‘For, taking off his shirt, it is necessary to beat him carefully with a lash, holding onto his hands’

c) **SeCs-2 with a passive participle with -no/-to as their matrix element.** In the majority of constructions including -no/-to predicates, the case of the argument cannot be determined unequivocally due to case syncretism (cf. Chapter 2.1.4, 2.2). Moreover, -no/-to is often headed by accusative-genitive plural animates/inanimates. In (19), however, the passive participle *pereloženo* ‘is undertaken’ governs an infinitive *poslati* ‘to send’ with a feminine NOM-arg *rat’ svoja* ‘his troops’.

(19) PDSK II, p. 68, 1517, cited in Timberlake 1974: 16:

<i>u</i>	<i>carja</i>	<i>pereloženo</i>	<i>na</i>	<i>se lěto</i>	<i>rat’</i>	<i>svoja</i>	<i>na</i>
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by	tsar	undertake- PTCP.PASS	for	this summer	troop	his - REFL	to
<i>moskovskuju</i>	<i>ukrajnu</i>	<i>poslati</i>					
Moscow	region	to-send-INF					

‘by the tsar it was undertaken to send his troops to the Moscow region for the summer’

**d) SeCs-2 with an imperative verb as their matrix element.**<sup>6</sup> In rare cases, NOM-args occur directly before or after imperative verbs as in (20), where the noun *žena* ‘wife’ precedes the imperative verb *nakazuj* ‘punish’. In most examples of this subtype, however, the imperative is subordinated to an independent infinitive. For instance, in (21) *poroucě daite* ‘to give an order’ is an imperative verb with two NOM-args *rouka* ‘hand’ and *glava* ‘head’.

(20) Dom. 16<sup>th</sup> c.:

<i>A</i>	<i>žena</i>		<i>na</i>	<i>tebě</i>	<i>nakazuj</i>	<i>naedine</i>	<i>da</i>
and	wife - NOM.F.SG		on	you	- punish - IMP	alone	and
				DAT			
<i>nakazavъ</i>		<i>primolvi</i>	<i>i</i>	<i>žaluj</i>	<i>i</i>	<i>ljubi</i>	<i>eja</i>
punishment		- say	and	care -	and	love	- her-
GER.PAST			IMP			IMP	GEN.

‘And [you] alone, punish the wife and after [the] punishment say her to you and care [for her] and love her’

(21) ZSL 1., approx. 13<sup>th</sup> c. cited by Dunn 1978: 114:

<i>Moisey</i>	<i>oubô</i>	<i>poroucě</i>	<i>daite</i>	<i>rouka</i>
Moses	that	order	to-give IMPER	- hand - NOM.F.SG
<i>za</i>	<i>roukou</i>	<i>oko</i>	<i>za</i>	<i>oko</i>
for	hand	eye	for	eye
<i>a</i>	<i>glava</i>	<i>takože</i>	<i>za</i>	<i>glavou</i>
and	head. NOM.F.SG	also	for	head

‘[It is] Moses’ order [that] it is necessary to give hand for hand, eye for eye and also head for head’

<sup>6</sup> A similar use of the nominative object marking was also widely attested in the Finnic language and in languages of the East of the Circum-Baltic area (cf. Seržant 2016).

**B.3. SeCs-3:** There are two peripheral phenomena that also show a noncanonical NOM-arg, which I collectively refer to as **SeCs-3**. This group again contains two types of example:

**a) Examples with a figura etymologica containing independent infinitives similar to the**

**PiCs:** In these cases, the noun in the NOM-arg has the same stem as the infinitive, for instance *služba služiti* ‘it is necessary to perform the service’; *rabota rabotat* ‘it is necessary to do the work’, *pašnja pachat* ‘it is necessary to plow the land’, etc. The earliest examples can be found in early Old Russian texts, but they were especially frequent in the vernacular and chancellery language of Moscow as well as in South Russian texts particularly in the 15<sup>th</sup>–17<sup>th</sup> c. They were used as a part of formulaic expressions recurring in various texts.

**b) Examples in a “nominative in a list” with a NOM-arg and, similar to the SeCs-2, a finite**

**verb:** The so-called “nominative in a list” (Rus.: *imenitel'nyj perečislenija / imenitel'nyj prisoedinenija*) is described in various philological works (e.g. Šachmatov 1903: 130; Staniševa 1966: 5; Havránek 1968; Filin 1969). Šachmatov (1903: 130) formulates an optional rule for the appearance of the NOM observing that, when a long list of enumerated items (objects) is subordinated to a finite verb, usually only the first noun appears in the proper oblique case (ACC), whereas the subsequent nouns often take the NOM. Usually, the conjunctions *i* or *da* ‘and’ connect the objects as in (22), which consists of a list of village and city names that follow the finite verb *daju* ‘give’. If they are feminine, they stay in the NOM instead of the ACC case, like *Trostna*, *Neguča*, *Jur'eva sloboda*, *Kremična*. Other examples for the nominative in a list have been cited by Zaliznjak (2004: 157) from the Birch bark documents (15<sup>th</sup>–17<sup>th</sup> c.). In these examples, the lexemes *šuka* ‘pike’ (23) and *šuba popolonka* ‘one fur into the bargain’ (24) follow the finite verbs *poslale* ‘you sent’ or *dal* ‘you gave’ and are marked in the NOM.

(22) DDG, 1389:

<i>a</i>	<i>se</i>	<i>daju</i>		<i>synu svoemu knęzyu</i>	<i>Zvenigorod</i>	<i>so</i>	<i>vsěmi</i>
				<i>Yur'yu,</i>	<i>volostmi,</i>		
and	this	[I] PRS.1.SG	give	-	son own	lord	Zvenigorod with all parish
<i>i s tamgoju [...]</i>	<i>i</i>	<i>sъ</i>	<i>sely, so vsemi pošlinami</i>	<i>A volosti Zvenigorodskie: [...]</i>			
and with seal			and with villages and with all duties	And villages Zvenigorod			

<i>Skirmenovo s Belmi,</i>		<i>Trostna,</i>		<i>Neguča,</i>	<i>Jur'eva sloboda,</i>	
		<i>Surožyk,</i>				
Skrimenov	from	Trostna-NOM.F.SG		Negucha-	Yuryeva	land-
Belm		NOM.F.SG Surožsk			NOM.F.SG	
<i>Zamoš'skaja</i>	<i>sloboda,</i>	<i>Ruza</i>		<i>gorodok</i>	<i>Kremična [...]</i>	
Zamosk	land-NOM.F.SG	Ruza -NOM.F.SG	city	Kremich -	NOM.F.SG	

‘and this I will give to my son lord Yuriy Zvenigorod with all parishes and with seal [...] and with villages and with all duties. And the land of Zvenigorod: [...] Skrimenovo with Belm, Trostna, Negucha, Syrozsk, Yuryev land, Zamorsk land, Ruza city, Kremich [...]’

(23) Ber.gr. 169, 14<sup>th</sup>–15<sup>th</sup> c.:

<i>Ontane</i>	<i>poslale</i>	<i>Ovdokimu</i>	<i>dva</i>	<i>kleša</i>	<i>da</i>	<i>ška</i>
Anton	sent-	Evdokim	two	bream	and	pike- NOM.F.SG
	PAST.2.SG					

‘Anton sent two breams and one pike to Evdokim’

(24) GVNP, N 199, 15<sup>th</sup> c.:

<i>A</i>	<i>dalъ</i>	<i>on</i>	<i>tomъ</i>	<i>seli</i>	<i>Fedorъ</i>	<i>i</i>	<i>ego</i>
					<i>Lukijani</i>		
And	give-	he	this	village	Fjodor Lukyan	and	his
	PST.2.SG						
<i>bratnimъ</i>	<i>dětemъ</i>	<i>Grigor'ju</i>	<i>i</i>	<i>Selivestru</i>	<i>i Ivanu</i>	<i>dvěnatstъ</i>	<i>sorokovъ</i>
brothers	children	Georg	and	Selivestr	and	twelfth	bundle
				Ivan			
<i>bělъ</i>	<i>da</i>	<i>šuba</i>		<i>popolonka</i>			
fur	and	coat -NOM.SG.F		addition			

‘and he gave to Fjodor Lukyan from this village and to his brother’s children to Grigoriy, and to Silvester and to Ivan twelve bundles of fur and also a fur coat’

Some scholars consider the nominative in list as “unmotivated” and syntactically isolated (cf. Staniševa 1966: 5; Havránek 1968). They observe that in such lists, the NOM-arg of the finite verb does not always replace the ACC, but also alternates with other oblique cases like the INSTR or DAT. Moreover, these examples differ from the other NOCs in their semantics. Instead of a modal meaning, they express a wish or a command to perform an action and thus

another aspect of deontic necessity (cf. Chapter 2.1.2). Even though the use of noncanonical NOM object marking in the SeCs-3 does not seem to have a systematic character, it might have contributed to the dissemination of NOCs in Middle Russian and their preservation in modern dialects.

Other issues with respect to NOCs are the geographical restrictions and distribution. Borkovskij (1944) assumed that in the Old Russian period, the NOC construction must have originated as a dialectal syntactic feature in Novgorod, Smolensk and Polotsk. He explained the later attestation of the construction in the western Old Russian documents (it was used in official, trade and legal documents especially frequently) and in the Muscovite chancellery language as having been influenced by the expansion of the Novgorod republic (and colonization of the eastern and northern regions) due to trade relationships. The use of the NOC construction also expanded into other regions and became the norm or at least a feature of chancellery language there, too (Jaroslavl', Nižnij Novgorod) (Borkovskij 1949: 345). This will be discussed in more details in Chapter 5.7.2.

### 2.1.3. Aspects of case variation (NOM vs. ACC)

The variation of *noncanonical NOM* object marking, and *canonical ACC* object marking is already attested for both PiCs and SeCs in the earliest Old Russian sources and their copies, respectively. Variation is documented even in texts in dialects in which NOCs appear predominantly, for example, in documents from Novgorod, Pskov, and Smolensk such as in *Russkaja Pravda* ('Russian law', RP; in different copies from the 13<sup>th</sup>–15<sup>th</sup> c.), *Voprošanie Kirikovo* ('Questions of Kirik', VK), *Berestjanye gramoty* ('Birch bark documents', Ber.gr.; from the 13<sup>th</sup>–14<sup>th</sup> c.), *Novgorodskaja pervaja letopis'* ('Novgorod First Chronicle', Novg.let.), *Lavrentjevskaja letopis'* ('Laurentian Chronicle', Lavr. let.), *Galicko-volynskaja letopis'* ('Galician-Volynskian Chronicle', GVL), *Ipatjevskaja letopis'* ('Ipatian chronicle', Ipat.let.), *Gramoty Velikogo Novgoroda i Pskova* ('Novgorod Treaties', GVNP; from the 13<sup>th</sup>–14<sup>th</sup> c.) and *Dogovornaja gramota 1229* ('Treaties from 1229', Dog.gr. 1229) that basically represent the language of Smolensk (and have two redactions, i.e., the Gotland and the Riga redactions, and different copies of each redaction).

The following PiCs (25) and (26) illustrate the described case variation: both stem from the same copy of the Treaty of Riga (1229, Gotland redaction) and are semantically basically identical; however (25) shows a NOM-arg and (26) an ACC-arg:

(25) Dog.gr. 1229:

<i>takova</i>	<i>pravda</i>	<i>uzjati</i>	<i>Rusinu</i>	<i>ou</i>	<i>Rize</i>
this - NOM.F.SG	right - NOM.F.SG	to-take INF	- Russian	in	Riga
<i>i</i>	<i>na</i>	<i>Gočkom</i>	<i>breeze</i>		
and	in	Gotland	shore		

(26) Dog.gr. 1229:

<i>taku</i>	<i>pravdu</i>	<i>vzjati</i>	<i>Rusinu</i>	<i>i</i>	<i>u</i>	<i>Rize</i>
this - ACC.F.SG	right - ACC.F.SG	to-take - INF	Russian	and	in	Riga
<i>i</i>	<i>na</i>	<i>Gočkom</i>	<i>breeze</i>			
and	in	Gotland	shore			

‘this right is for a Russian to take an oath in Riga and in the Gotland shore’

The next examples are comparable despite being taken from different texts. They contain the same lexeme *grivna* ‘grivna (currency)’ governed by an independent infinitive but once in NOM (27) and once in ACC (28):

(27) Smol.gr.1229 translation cited from Timberlake (1974: 8):

<i>Aže</i>	<i>bouděte</i>	<i>xolъpъ</i>	<i>ubitъ,</i>	<i>a</i>	<i>grivna</i>
If	will	slave	kill	so	grivna - NOM.F.SG
<i>ser'bra</i>	<i>zaplatiti</i>				
silver	to-pay - INF				

‘if a slave is killed, one is to pay one grivna in silver’

(28) RP, Sinod. spisok, end of the 13<sup>th</sup> c.:

<i>A</i>	<i>kto</i>	<i>i</i>	<i>klěpal</i>	<i>a</i>	<i>tomu</i>	<i>dati</i>
and	who	and	lied	and	he - DAT	to-give-INF

*drougoju*                      *grivnou*  
 another- ACC.F.SG      grivna - ACC.F.SG

‘and if someone has lied, then he must pay another grivna’

Moreover, the NOM-arg not only alternates with the ACC-arg but can even be co-ordinated with an ACC-arg as in (29) and (30). There even are examples with a NOM-arg combined with a pronominal adjective attribute in ACC as *vsju* ‘all’ (31).

(29) ‘Fable about a Hen and a Fox’ 17<sup>th</sup> c.:

<i>Odna</i>	<i>žena</i>	<i>ponjat</i> ‘	<i>po</i>	<i>zakonu,</i>
one	woman - NOM.F.SG	to-take - INF	for	law
<i>a</i>	<i>druguju</i>	<i>ponjat</i> ‘	<i>dlja</i>	<i>detej</i>
and	other - ACC.F.SG	to-take - INF	for	children

‘one woman you must take in law, and another one for children’

(30) VK, 1130–1156, cited by Zaliznjak (2004: 157)

<i>im</i>	<i>i</i>	<i>euvangel’ju</i>	<i>celovati</i>	<i>i</i>	<i>dora</i>
they - DAT	also	gospel - ACC.F.SG	to-kiss - INF	and	unleavened bread- NOM.F.SG
<i>jasti?</i>					
to-eat-INF					

‘They must kiss the gospel and eat unleavened bread’

(31) Pos., 1724:

<i>Vzjat’</i>	<i>vsju</i>	<i>ta</i>	<i>skotina</i>	<i>na gosudarja</i>
to-take - INF	all ACC.F.SG	- this - NOM.F.SG	cattle - NOM.F.SG	for lord

‘It is necessary to take all that cattle for the governor’

There are several studies on the distribution of both cases either in individual texts or copies or in different redactions of Old and Middle Russian texts (cf. Chapter 5 and also in Appendix) ,

most of which suggest that in the north-western Russian area the NOM was used more frequently than the (canonical) ACC for object marking in all types of infinitival sentences until the later decades of the 17<sup>th</sup> c. However, the conclusions of these empirical analyzes are ambiguous: not even within one and the same dialectal area or period does the distribution of the nominative versus the accusative object show any similarity or consistency. Moreover, both NOCs and AOCs – although in varying proportions – are represented in all texts that contain NOCs regardless of their genre (cf. Chapter 2.2). As the present investigation aims to explain the factors that trigger the choice of NOM or ACC, the use of the two variants is analyzed in a large diachronic corpus, namely the corpus of chancellery language created especially for that purpose (cf. Chapter 4). The next section argues in favor of a restriction to this register.

## **2.2. Varieties of Russian with NOCs**

### **2.2.1. Diachronic and genre-specific aspects of NOCs**

Some scholars (cf. Sprinčak 1941; Obnorskij 1934; Borkovskij 1949; Timberlake 1974; etc.) have assumed that the use of NOCs was limited to texts stylistically close to vernacular (spoken) language, such as treaties and Birch bark documents, and that in “higher” literary texts, only AOCs were used. Later investigations (cf. Dunn 1978) showed that the use of NOCs was not limited to stylistically “lower” texts by providing evidence for NOCs in chronicles, religious, folklore, hybrid, and even literary texts of the later Middle Russian period.<sup>7</sup> However, the most frequent use of NOCs has been registered in texts displaying so-called *chancellery language* in the Middle Russian period.

The frequent use of NOCs in such texts can be explained by their specific modal semantics of “necessity”. Generally, infinitive modal constructions were frequent in Middle Russian. Like in other languages, Russian infinitive sentences were originally polyfunctional and gradually developed different patterns expressing both modal and nonmodal meanings. Therefore, the infinitive itself was finally reanalyzed and assigned new functions (probably in the 14<sup>th</sup> c.; cf. Timofeev 1959; Fomin 2003; etc.). For the Old Russian period, Fomin (2003: 200–201) distinguishes six types of infinitive sentences that differ in their specific modal meaning. Other

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<sup>7</sup> For general remarks on Russian language history cf. Chapter 2.2.

sources identify up to ten and list NOCs amongst them. Throughout the history of Russian, diverse syntactic and semantic changes in infinitival constructions and the rise of modality and modal verbs has led to various patterns, some of which were replaced or disappeared completely. However, some patterns – like NOCs – are preserved in modern dialects, possibly because of their complex nature. Another important factor for their preservation might be their high frequency in chancellery language. In chancellery language, more than 80 % of the constructions were infinitive sentences including NOCs (cf. Borkovskij 1949: 80–82).

Both factors – time and genre – play an important part in describing and explaining of this type of language variation. Therefore, the present investigation focuses on periods with a high frequency of NOCs, especially the Middle Russian period, and within these periods on texts that exhibit the main characteristics of the Russian chancellery language.

### **2.2.2. Characteristics of the Middle Russian period**

In the history of Russian, the so-called *Middle Russian period* (or, sometimes, “Middle Old Russian”; 15<sup>th</sup>– 17<sup>th</sup> c.) follows the Old Russian period, which dates from the 10<sup>th</sup>–14<sup>th</sup> c. Middle Russian can be divided into two subperiods: the early and late Middle Russian eras. The early Middle Russian era dates from the early 15<sup>th</sup> to the late 16<sup>th</sup> c. and corresponds to the consolidation of power under the supremacy of Moscow (therefore, it is often called the *Muscovite phase*). The late Middle Russian era covers the 17<sup>th</sup> c., when the power of the Tsar was extending to other regions.

The Middle Russian period is considered the most decisive period for the formation of the Russian language system and is characterized by a high degree of variation resulting from various linguistic and extralinguistic (political and economic situation, language standardization) factors. The Muscovite expansion and along with the spread of political and social Muscovite institutions has been identified as an important extralinguistic factor for language variation and change. Territorial expansion was accompanied by social, economic and political integration processes; the institutions intervened in communal life and established regulations for it, and a common religious culture and commonly valued secular attitudes developed. Pursuing social changes and specific economic interests resulted in the interaction of the elite with various population groups.



Therefore, the Middle Russian period was characterized by internal and external multilingualism, that is, the coexistence of different languages and their varieties. In this multilingual situation, it was no longer possible to preserve the standards of Church Slavonic, as the features of spoken, outright dialectal speech entered the written tradition. Therefore, new linguistic repertoires began to emerge as competing variants of different origin blended and produced new ones.

Frequently, the difference between Middle Russian and its closest relatives – contemporary Ukrainian and Belarusian – is highlighted: whereas these were strongly influenced by Polish, Russian was influenced by its dialects,<sup>8</sup> as well as by *prosta mova* “Old Ruthenian” (cf. Ševelev 1993; Parkhomenko 2017). The translators, scribes, and clerks who produced chancellery language were predominantly Ukrainians and Belarusians, born in the territory of today’s western Ukraine and Belorussia and educated in Kiev. Their (Great) Russian and Church Slavonic was not fluent enough to produce uncontaminated texts (cf. Isačenko 1974; Moser 1998: 23–24). Therefore, the impact of *prosta mova* on the formation of standard literary Russian is supposed to have been more substantial and far reaching than on the formation of modern literary Ukrainian and Belorussian (cf. Uspenskij 1987: 263, 275).

Besides the Muscovite expansion and the concomitant internal and external multilingualism, **standardization** was a crucial extra-linguistic factor for language change in the Middle Russian period. In the multilingual situation, it was no longer possible to preserve the standards of Church Slavonic because features of spoken, colloquial-to-dialectal speech entered the written tradition. However, the norms were not yet codified, and if texts were corrected lexically or syntactically at all, these corrections were random and inconsistent. Under these conditions independent varieties emerged, were reproduced and were transformed.

In the Middle Russian period, the coexistence of (at least) two written traditions increasingly allowed the use of expressions and constructions from both traditions as variants within one

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<sup>8</sup> Some elements were, e.g., incorporated into Russian from the Old Novgorod dialect but not into the other East Slavic languages. The Old Novgorod dialect was not only used in the city of Novgorod and neighboring Pskov but in a much larger territory under Novgorod’s control that extended to the White Sea (e.g., Archangelsk), the northern Urals, and the Kola Peninsula – the so-called “northern zone”. The southern zone of Russian included Kiev, Suzdal’, Rostov, the emergent center Moscow, other southern parts of Russia, and the Ukraine, and parts of Belarus. Importantly, this division does not correlate to the modern division of the East Slavic languages into Russian, Ukrainian, and Belarusian.

and the same text with specific differentiating functions (such as a differentiation of modality)<sup>9</sup>. Under these circumstances, the rules for the use of different variants of one construction or form varied from text to text. Processes of linguistic normalization (for instance, in the form of hypercorrections) often started in specific areas or regions. In parallel, marked Church Slavonic forms were used as archaisms. Therefore, Middle Russian texts vary regarding the choice of grammatical forms and syntactic constructions. Additionally, they vary with respect to their content: in texts like *Sudebnik* (15<sup>th</sup>–16<sup>th</sup> c.) and *Domostroj* (16<sup>th</sup> c.) topics of everyday life occur next to religious topics. Therefore, these texts are called hybrid texts.

The Middle Russian period was shaped by simultaneous traditions of literary and spoken registers. In historical studies on Russian, the term *register* is used to distinguish between the different written traditions existing at a time. The term is used as a “general cover term for situationally defined varieties [...] associated with particular contexts or purposes” (Biber 1995: 1) depending on the pragmatic aims and purposes of the speakers/users. Živov (1996: 15) describes four different registers in Middle Russian: (1) the standard literary language (Old Church Slavonic), (2) the hybrid literary language (Russian Church Slavonic), (3) the chancellery language (ru.: *prikaznyj jazyk*, *aktovyj jazyk*; cf. Chapter 2.2.3), and (4) the profane nonliterary language. Each of these was an “autonomous usus” (Živov 2000: 573, already mentioned in 1998), whereby the term *usus*, – as common in Russian philology – designates all possible manifestations of linguistic forms in language use, derived from the restricted number of elements within the language system (cf. Krysin 2007: 5). According to Živov (2006), the categorization of a text’s register depends on the number of “bookish” (Rus.: *knižnyje*) and “nonbookish” (Rus.: *neknížnyje*) variants in the text and the respective function of these variants in the usus of a register. As registers closely interact with the communicative purpose of a text, the choice of either bookish or nonbookish variants essentially depends on the text’s pragmatic function (Živov 2006: 36).

The most important feature of usus is its “continuity (Rus.: *prejemstvennost’*). The usus continuum cannot be separated from the language system or language variety and does not constitute a distinct norm or variety. However, it can become part of a so-called stable variation for a long period of time. Especially in periods of formation and stabilization of linguistic traditions (e.g., the Middle Russian period in Russian language history), the linguistic norm, its

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<sup>9</sup> About dichronic development of modal construction see in Hansen & de Haan (2009), Hansen & Grković-Major (2010), Hansen (2010a).

systematic, internal rules and its language usage do not oppose or contradict each other. Variation in language use and the coexistence of variants (one of which can be seen as the “norm” and the other as the “innovative” form) can exist over a long period of time, with an actual form of interrelationship between the norms and the language usage.

Timberlake and Živov & Timberlake (1997: 13) have shown that variation does not necessarily involve the macrolevel of the language system. In some cases, microlevel variation occurs in language use that is limited to a certain situation and/or a certain tradition. Other “subjective” factors influencing the preservation of variation or the use of a variant can be: 1) the recurring use of specific phrases on a regular basis (e.g., SeCs-3 like *pašnja pachat* ‘to plow the land’), 2) the degree of a citational character (Rus.: *citirujemost*) of the text, and 3) a desire for archaisms, especially in syntax, “involving characteristic morphological variants for such constructions” (cf. Živov 2004: 20). One limitation of this is the frequently use of NOCs in so-called chancellery language or texts, which could be characterized by these features.

### **2.2.3. Characteristics of Middle Russian chancellery language**

Generally, the term “chancellery language”, as used in European historical linguistics (Germ.: *Kanzleisprache*, cf. Greule 2001), describes “the language of an administration unit (chancellery) established by a (secular or spiritual) sovereign, and located with him or his governors, in which mainly documents, laws, judgments and dispositions were drafted” (Besters-Dilger 2009: 1352; translation U.Y.). The characteristic profile of this register rests on its function as a communicative medium. Chancellery texts were always documents addressed to specific recipients with “contact setting and appellative intention” (Lazar 2009: 124). Their primary purpose was not only to unambiguously communicate information or requests, but above all, the realization of illocutionary speech acts with a performative verb (e.g., *I hereby give ...*, *I hereby dispatch ...*). These speech acts had to be qualified as authentic and valid; this was achieved by a formal frame with a specific linguistic tradition and terminology. This makes chancellery language a discrete (autonomous) register. Chancellery texts had different grades of formality, ranging from more highly formalized judicial texts to private letters (cf. Lazar 2009). However, even the latter cannot be considered vernacular texts, because they followed specific norms and principles including a formal language in order to fulfill their above-described pragmatic function. Niktin (2004) defines the specific, distinct features of chancellery texts as follows: they are 1) dominated by a linguistic tradition, 2) conservative, 3) lexically

limited, 4) not determined by a specific situation, 4) in a monologue, 5) unemotional, 6) not individualized, 7) unspontaneous, and still 8) containing nonstandard vocabulary and elements typical of spoken language syntax. In this book, the term “chancellery language” carries this general notion but will also be furnished with more specific details in Chapter 2.2.3.

Russian chancellery language existed besides the literary language and, like Middle Russian in general, was shaped by internal multilingualism in the expanding Russian Empire. Chancellery texts had to be comprehensible to ordinary people from different regions and therefore frequently included elements of spoken, dialectal language. Moreover, detailed discussion of the development of Russian chancellery language (especially in the 16<sup>th</sup> and 17<sup>th</sup> c.; cf. Besters-Dilger 2009) has highlighted the impact *prosta mova* “Ruthenian” on its development as well as its influence on the development of the literary language of the 18<sup>th</sup> c.

The chancellery language of the Middle Russian administration of the 16<sup>th</sup> and 17<sup>th</sup> c. is frequently described as *prikaznyj jazyk* ‘administrative language’, which set the standard for all types of official documents from the middle 16<sup>th</sup> c. The term *prikaznyj jazyk* originally referred solely to the administrative language of *prikazy* ‘order’ that had been created under tsar Ioann III at the end of the 15<sup>th</sup> c. It was a subtype of chancellery language and limited in use. With the advancing centralization of the Tsardom of Russia, the importance of *prikazy* increased, and the *prikaznyj jazyk* gradually became the role model of chancellery language in the whole of north-eastern Russia. In the first half of the 16<sup>th</sup> c., the chancellery language in this territory still varied according to regional phonetic and lexical peculiarities. However, by the middle of the century, the differences had disappeared. An overview of the features and characteristics of *prikaznyj jazyk* can be found Besters-Dilger (2009). She highlights how Middle Russian *prikaznyj jazyk* only partially intersects with the vernacular, for example, regarding the lexicon. Its syntax of was shaped by *prosta mova*. She further observes that the language of *prikazy* was employed to secure power and was not meant to be reproduced by the population. It was tied to the (Church Slavonic) tradition, conservative, inflexible, lexically limited, and register dependent (Besters-Dilger 2009: 1352, 1364).

These characteristics complicated the production of chancellery texts. At first glance, they are shaped by a comparable structure and share specific lexical and syntactical patterns. Simultaneously, they are characterized by a high degree of variation of certain linguistic features that mirrors the authentic and complex linguistic situation of the time. It is especially interesting to observe how vernacular or dialectal as well as Church Slavonic elements in

chancellery texts vary over time. The development of norms on the document level also altered the criteria for language standardization. On the one hand, there was a gradual elimination of marked dialect forms, while on the other, many dialectal morphological variants lost their areal restriction and became part of a written norm. Therefore, in later chancellery texts, the influence of Church Slavonic is rather weak in comparison to the influence of vernaculars and dialects.

### 3. Theoretical approaches and research history

The phenomenon of noncanonical object marking has also been attested in other languages (cf. Ambrazas 2001, Holvoet 2003, Seržant 2016 etc.). In general, non-canonical argument marking means that the case assignment of core arguments in somehow deviate the predominant coding pattern both within the language itself and in known in general for languages with a nominative-accusative alignment. The notion of a so-called “non-canonical” subject and object marking entails a certain understanding of the concept of subjecthood and objecthood in general that requires some clarification.

It was assumed (Comrie 1978; Givón 1984, Dixon 1994) that the primary function of case marking is to grammatically distinguish arguments in a transitive clause and the secondary function is to distinguish them according to their semantic functions. The nominative then marks the subject for its privileged syntactic position and its specific syntactic behavior. For Russian, the relationship between the notion of subject and the grammatical relations to the case marking strategies has been extensively dealt with. In the studies of Comrie 1989; Chvany 1996; Testelec 2001, and others, subjects are divided into canonical subjects (i.e. marked with the nominative) and non-canonical subjects (i.e. marked with a non-nominative case) and investigated with respect to whether they do or do not pass the subjecthood criteria, aiming at a proposal for a cross-linguistic definition for subjecthood. In recent studies, however, the adequacy of this hypothesis has been questioned, especially in relation to other syntactic functions like objects. It was demonstrated, however, that case marking could also fulfill semantic functions, to a varying extent coherent with various usage pattern (cf. Testelec, 2003: 63-68, Arkadiev 2008; also, Livitz 2006). Moreover, in traditional Russian linguistics, the notion of subjecthood is often interpreted as a two-tiered system which entails the grammatical subject (ru: *podležaščee*) and the semantic subject (ru: *subjekt*). Livitz (2006), Zimmerling (2009), and Grillborzer (2014) proposed different models and typologies for subjectlike arguments in Russian.

From a diachronic perspective, it seems especially difficult to set up a clear explanation of the correlation between the case marking strategy and the grammatical status of the argument in the clause. Considering that on top of that, case assignment strategies as well as the notions of subject and object, most likely underwent a gradual historical development, it seems obvious that various processes can have had an influence on the apparent mismatch of the form -

function strategies and could have affected the case marking of the subject or the object and also on their productivity or recessivity in some periods, for example. Very often, for instance, the synchronic abstract meaning of most cases arose from the more concrete meaning of their morphemes that changed or specified their original meanings due to various processes of grammaticalization (cf. Haspelmath 1989; Lehmann 1995).<sup>10</sup> Therefore several open questions are still to be answered: What motivates the non-canonical case marking of arguments and how it could be explained historically? Why some of the patterns are more productive than another? And what triggers the case variation for non-canonical marking? Furthermore, it is still not clear if an argument would have to have a minimum number of subject properties, or non-subject properties, in order to qualify as a subject or an object, and which properties they would have to be.

Against this background, the formulation of a generalized rule to explain the mechanism of case licensing and case variation in NOCs and AOCs within the framework of recent syntactic theories is a key concern of research on the phenomenon. As Chapter 3.2 shows, a generalized rule that is applicable to different languages and adequate for historical situations and developments cannot be established on purely syntactic grounds. Yet, discussion of the research history on NOC syntactic hypotheses regarding case variation in NOCs and AOCs (cf. Chapter 2.1.4) helps to identify and list possible influencing factors for case variation in these constructions (cf. Chapter 3.3.). Chapter 3.4 then proposes an alternative approach to case variation based on a multifactorial analysis within the Competing Grammar Approach.

In my working definition, the *non-canonical grammatical objects* are objects expressed by a nominative noun phrase which deviates from the canonical case marking of the object in Russian (with accusative)<sup>11</sup>. Such objects are most typically a patient of the action. Canonical grammatical objects, then, will be such objects which are often expressed by an accusative noun phrase. *Non-canonical subjects*, on the other hand, are those subjects which are realized for example by a dative noun phrase. They are often the experiencer and not the agent of an action.

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<sup>10</sup> It should also be mentioned that in most languages, cases like the nominative and the accusative have a polyfunctional nature, and there also exist a number of nearly parallel sentence types that show different degrees of the subject properties (such as the modal dative infinitive constructions in Russian, cf. Grillborzer 2014; Kyröläinen 2015).

<sup>11</sup> If we take very strict (and traditional) perspective: that the subject should be marked by nominative case and the object by accusative.

Keenan (1976) proposed the prototypical properties for the subject in terms of syntactic, semantic and discourse features. He compared thirty criteria for the category of subject in more than 200 languages of different types. These criteria include case marking as well as agreement and word order criteria which can vary from language to language. Traditionally, nominative case marking is associated with subjecthood in languages that, like Russian, follow the nominative-accusative alignment pattern. A subject-like argument controls verb agreement, it controls a reflexive pronoun, it usually is the agent or experiencer of the action, and it occupies the position left of the predicate verb. In Keenan's approach, all these properties and their combinations, including the case marking, are optional and can vary from language to language. So, the one syntactic element in a sentence that exhibits more of these thirty optional properties than any other of the elements can be assumed to be the grammatical subject of the sentence. Yet, this does not mean that any of these properties occur randomly in one element. On the contrary, it means that a feature like the case-assignment mechanism for a subject or an object is very likely to be driven by other various properties occurring in combination with it.

Thus, it is assumed that in languages like Russian, which have a nominative-accusative alignment system, the object and subject categories are differentiated through case marking and agreement functions in a specific correlation: According to Dixon (1994), the function of categories like subject and object depends on the transitivity or intransitivity of the respective clauses, the subject being defined as the core argument of an intransitive clause. In other studies, it was proposed that the marking of grammatical functions depends on the verb types (Aikhenvald 2001, Neidle 1988). However, as stated in chapter 2, the extensive study of the development of the category of transitivity and the notion of an object in the history of Russian (Krys'ko 2006)<sup>12</sup> has shown that the strategy of marking a direct object by the accusative was developed in a gradual process starting from the independent accusatives, which occur with verbal and nominal forms and were later also determined by the presence of certain (active) verbs. By comparing various languages and analyzing the respective case coding properties,

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<sup>12</sup> This idea is mainly based on Popov's (1881) reconstruction of the nominative-accusative grammar which developed from the active language typology common to the Indo-European languages and represents the transitional stage of the development of the case assignment strategy for nouns (for more details of Popov's reconstruction cf. for example Danylenko 2016). Therefore, the mechanism of case assignment was merely semantic and based on the semantic properties of verbs and noun phrases. As a result, the accusative and nominative marking for an object have been often interchanged (for example in the case of the NPICs and APICs). This case variation between nominative and accusative case was possibly a result of the strengthening of the nominative-accusative and accusative-genitive alignment in the system of East Slavic to distinguish between animate and inanimate objects.



Popov demonstrated the alternation of the accusative and the nominative cases in the early Old Russian sources, in the material of texts dating from the 11<sup>th</sup> to the 14<sup>th</sup> centuries where the interchanging use of both cases significantly differs from that in modern Russian, Ukrainian and Belarusian, but is quite similar to the constructions (to possessive constructions) in Indo-European languages (cf. Popov 1881:51). He argues that originally the category of transitivity and the notion of object in Russian had no distinct grammatical status but was associated only to the syntactic environment (the so called "behavioral properties"). So, properties such as case marking and agreement (the so-called "coding properties") would have been acquired later (as in the Latin language). The formation of the passive as a voice category, according to him, closely correlates with the categories of transitivity and a direct object marking by the accusative.

Therefore, especially for Old Russian, it seems that the distinction between transitive and intransitive verbs was not yet important and only developed later, whereas the difference between static and dynamic verbs which also correlates with the distinction between animate and inanimate nouns was even more relevant. Thus, the case marking of nouns often varies as in the nominative object constructions, which were explained for example by Stepanov (1984) as a reflex of paratactic clause-chaining and historically contained a nominative subject transformed later into an object. The issue of the status of the nominative argument in nominative object constructions and its development will be discussed in more detail further below in this chapter.

Canonical subjects are nominative phrases and trigger verbal agreement, whereas canonical objects are distinguishable from them by their accusative case marking and because they do not trigger verbal agreement. Additionally, subjects typically have the semantic function of an agent (in active clauses) and objects have the function of a patient. However, in diverse languages, there are various syntactic constructions that deviate from this seemingly canonical coding pattern and do not show a one-to-one relationship between the grammatical categories of subject and object and the semantic roles agent and patient, nor of the case marking strategies (nominative, accusative, dative) and the semantic roles, as, for instance, the nominative object constructions in Old Russian that exhibit different ways in which the semantic roles are syntactically coded.

Second, in recent years, the question of case licensing mechanisms has brought into focus the diachronic perspective (both cross-linguistically and language specifically) and the diachronic

development in the assignment of case. From the diachronic perspective, however, the case marking of subjects and objects must be a product of competing or conflicting tendencies leading to case variation in the subject and object marking over a long historical period, as the data from the Old and Middle Russian periods suggests. Therefore, for diachronic studies, it is not viable to explain the respective cases only by presupposing the relevance of the above seemingly general correlation of morphological form and syntactic and/or semantic functions. Moreover, there are also possible extra-linguistic factors causing the varying cases and their overlap in the subject/object marking (such as areal and register variation, cf. above 2.1. and 2.2.), which confirms that the variants of forms and constructions cannot be accounted for in a purely syntax-based (or, interlanguage based) framework.

Third, in order to identify the causes of the case variation and to explain the possible shift in the mechanism of subject/object marking, or rather: the shift from subject-to-object marking, it will be helpful to first collect all those properties of subjects and objects that have been proposed in systematic frameworks and theories, and then, to test their actual relevance for, and applicability to, this specific field of the history of Russian. For this purpose, the distribution of constructions with canonical and non-canonical case marking (as seen from the terminal point of this developmental shift) must be investigated in combination with a multifactorial analysis which includes all possible linguistic and non-linguistic factors that may have had an influence on the choice of the nominative or the accusative.

In the generative transformational framework, like the Minimalist program, the properties of subjects are systematically identified as syntactic properties. Since Chomsky (1980, 1981), it is assumed that Case is an abstract concept which also existed in languages that lack a morphological case system, so that, in this sense, every noun phrase must have case. The assignment of the case is therefore explained in structural terms. According to Chomsky (1981:50), case is assigned to a nominal phrase (NP) by the category that governs it, which is the head of the construction. Therefore, the abstract cases (usually marked with capitals like NOM, ACC) are structural cases that are differentiated from their morphological realization, i.e. the morphological case (usually marked by lower case letters like *nom.*, *acc.*, etc.), for example the inflexional affixes for lexemes (cf. Chomsky 1986:186). This differentiation also causes the diversity in case assignment strategies. According to Chomsky, the case assignment mechanisms should be explained as inherent properties of the respective NP which are projected

from the head of its maximal projection XP and formulated as “case checking rules”<sup>13</sup>. This assumption is related to the principle of the Case Filter, which helps to differentiate between grammatical and ungrammatical sentences (if the Case Filter is violated). Besides, a difference is made between “structural” and “inherent” cases. In the former, the use of case can be predicted by the syntactic or grammatical function of the noun phrase, whereas in the latter, it cannot be predicted on this basis, but is rather assigned, for example, on the basis of the lexical content of the predicate. Under this approach, Case is the representation of the grammatical relationship between a verb and its arguments. It seems that the accusative can be interpreted as a “dependent” case. Marantz (1991), for example, argues that the accusative crucially depends on the presence of another (core) argument (subject) in the clause. Unlike the nominative case, which is closely connected to the grammatical function of subject and which can combine with different thematic roles, the accusative is thematically more restricted and only used for the role of the patient. The case of the nominative object constructions shows, however, that this is not true for Russian and also Icelandic (see Babby 1991), where the nominative and accusative cases are not always in complementary distribution but can be used for the object NP and therefore are not positional variants.

The non-canonical nominative object marking, which is attested in various languages, became the central issue in the debate on the case licensing mechanism for an object and the case alternation between the accusative and nominative case. The main question is what exactly checked<sup>14</sup> the nominative or the accusative to the noun in different constructional types.

In more recent studies was proposed a generalization on the use of the nominative objects in diverse languages, i.e. that the object receives a nominative when there is no (nominative) subject (Woolford 2003:301). Based on this assumption, Babby (1994) explains the alternation of a non-canonical nominative object vs. a canonical object marking for Old Russian with the presence or absence of the external dative argument (i.e., logical subject). This explanation is not fully supported by the empirical data. Lavine (2012), for examples from Russian, Ukrainian

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<sup>13</sup> Case checking is a mechanism of matching features, which are in a loose sense the descendants of licensing under government.

<sup>14</sup> Often in minimalist works, the term “checking the case”, instead of “case assignment”, is used because all necessarily functional elements like tense, case markers and agreement features are considered to be already present before a constituent is spelt out. Therefore, it is necessary for the verb “to check” whether a case feature attached to a nominal phrase is justified in being where it is under the proper grammatical condition posed by the case theory.

and Icelandic, shows that first, Babby's generalization is not valid for all languages and second, that diachronically, there are a number of facts which oppose this generalization. Likewise, the next chapters will show that in the constructions investigated here, the nominative or accusative also appear independent of whether an external dative argument is present or not. It seems that the Russian language, especially from the diachronic perspective, demonstrates different strategies of case licensing (cf. Niedle 1988). Where the licensing of case cannot be explained with the structural or lexical contents of the syntactic context, then the nominative case was the morphological default case used when for a given abstract case, a morphological realization is unavailable. In other words, default case appears where none of the other cases can be assigned. Aissen (1999) even assumes that 'default' marking is identical to 'no case marking at all'. If this were correct, it is not clear how the co-occurrence of the accusative (marked case) in the same syntactic environments can be explained and how the case marking and the notions of the subject and object correlate with each other. So, the nominative object constructions illustrate that cases and grammatical functions (as subject or object) cannot be thought of as simple pairs.

As mentioned above, for diachronic studies it is also important to take into account the possible changes in the syntactic functions of the elements due to different processes of grammaticalization or contamination of different constructional variants or grammatical categories. From a historical perspective, the question of the causes for case licensing should be answered. For the Russian nominative object construction Jung (2010), for example, proposes a shift from subject-to-object. The question then is when this shift from one category to another took place. So, the question of the case licensing mechanism for objects and subjects is closely related to the question of the origin of the nominative object constructions in Russian (i.e., PiCs and SeCs, cf. above in 2.2), their distribution and their development.

My later analysis will show, however, that some of these subject properties are shared by the nominative object, and not by the accusative object, and that the nominative objects are also characterized by their grammatical and semantic behaviour, which differs from that of the accusative object.

However, as shown in the examples in chapter 2 the nominative argument in PiCs and SeCs is a case of mismatch of these proposed properties, since semantically, it fits the pattern of an accusative object (it is not an agent, but a patient) and behaves like an object, but syntactically, it still shares some subject properties, too. Moreover, it seems that some properties such as reflexivisation (the control of a reflexive pronoun) and word order, especially from a diachronic

perspective, do not carry as much weight as they have been given in some studies. Kryśko (2006) for instance shows that the direct-object in the nominative may exert the same control on reflexive pronouns as a subject, and in Old and Middle Russian, the word order varies. Moreover, case marking of the nouns is difficult to identify according to a strict distinction of transitive vs. intransitive verbs or their semantics. Cross-linguistic studies show that syntactic subject properties can be inconsistent and not all subjects in all languages share these seemingly universal properties, but rather behave differently with regard to the subject tests. Recent theories on the notion of subject propose that, possibly, “subject” is neither a universal category nor relevant for all languages (cf. Say 2016, Barðdal 2016 for a discussion of Russian), or that, at least from a diachronic perspective, its relevance differs over time. This means that the properties of the notion of subject are language-specific and, moreover, construction-specific, because they can vary according to the respective constructional type. Barðdal (2016) for example suggested that future studies could be more promising if they operate with an independent definition of subject not based on subject properties themselves, but on the argument structure and the relation between the arguments. This would also allow the comparison of different constructional types. From the diachronic perspective, it often seems helpful to observe possible changes in subject properties that happened over time. A more detailed analysis could help to identify changes with, or without, a visible motivation and thus provide a better understanding of the mechanism of syntactic change. The change of the construction could be the result of a process of reanalysis, but also an analogical expansion. The question then is whether this process affected all, or just some, of the elements of the construction. The arguments that would justify the hypothesis of reanalysis are the following: The construction expanded to other verb types, but also shows collocational restrictions; therefore, this expansion only occurs in specific types of the construction. Thus, some inherited subject or object properties) could be construction-specific and go back to a process of reanalysis or analogical extension, while at the same time, new grammatical, “epiphenomenal” properties could emerge while the inherited properties often still indicate the source.

Therefore, section 3.3.2. will list all factors which could have influenced the choice of the nominative or the accusative and which in chapters 4 and 5 will be tested through an analysis of the corpus data.

### 3.1. General remarks on research into language variation

Language variation and change are key issues for several linguistic subdisciplines. Each tries to explain the source of the variation and its effect within its own framework. Until the 1950s–1960s, most works assumed that language variation can be explained as “free variation” and that, in most cases, it does not have any systematic nature. Russian philological and linguistic works (e.g., Živov 1996) remark that, independent of its type (stylistic, grammatical, morphological) and its sources, variation always has a functional potential (Rus.: *funkcionalnyj potencial*). However, Živov (1996) does not exclude the possibility of free (unmotivated) variation. The American variationist tradition following Labov (1963, 1966) criticized such approaches and argued that different types of variation in language (or, at least, most languages) are controlled or influenced by systematic linguistic and extralinguistic (social) constraints or factors. Within the framework of Labov (1966, 1972), the impact of sociolinguistic factors determining the use of variants was not only analyzed qualitatively, but also quantitatively. This analysis is applicable to diachronic investigations, too. In the European tradition, most studies on language variation have also been influenced by Halliday (1978), Halliday & Hasan (1989), who proposed two types of variation:

- 1) user-related (variation determined by the group of users representing different social or regional structures, e.g., dialectal variation) and
- 2) use-related (variation of a language determined by its use in specific contexts or situations, i.e., the so-called “register variation”).

Halliday & Hasan (1989: 23) interpreted the register as “the set of meanings, the configuration of semantic patterns that are typically drawn upon under the specified conditions, along with the words and structures that are used in the realization of these meanings.” Therefore, the term “register” refers to specific lexical and grammatical choices made by speakers depending on the situational context, the participants in a conversation, and the function of language in discourse (cf. Halliday & Hasan 1989: 44). The term “register” helps to overcome the difference between “language” and “speech” and establishes the idea that “genre”, “style”, and “register” are three distinct, yet complementary, concepts. Moreover, it supports the description of different degrees of formality.

Biber (1995, 1999) was probably the first to analyze register variation corpus-linguistically. in order to answer the question of what drives the use of different patterns. From a diachronic perspective, variation in language has been analyzed in the works of Kroch (1989), Pintzuk (2003), etc. (For an overview of the development of research on register variation, see Giménez-Moreno 2006 etc.)

In order to explain the causes of language variation, Živov (1996) suggested that the following factors should also be considered:

- 1) continuity within the register (cf. Chapter 2.2);
- 2) the pressure of tradition (for a historical narrative or a private letter, this effect is less explicit and there is more freedom than for liturgical and official texts);
- 3) the variability of occasional variation that might later on become the most frequent pattern. He calls this “natural evolution”.

All three causes are closely related to each other and have an influence on the distribution of variants in language and its varieties. It is important to note that the establishment of certain elements can often be an adaptation of a long-existing norm and, therefore, some “innovative” structural variants can well express more archaic meanings (e.g., Živov 1996, 2006; Kry'sko 2004; Krysin 2007, 2007a).

To assess the degree of variability and characterize the type of register, Živov (2006) considered a proportional correlation of variants as characteristics of language registers. He also assumed that the choice of or preference for (a) particular variant(s) in ancient manuscripts of the same type (genre) might be an essential characteristic of the register itself, and that the manuscripts' syntactic characteristics form the basis for the differentiation of these registers. In Živov's (2006) approach, genres are instances of registers that are culturally recognizable and might invoke more than one register each. At the same time, one may assume a possible heterogeneous nature of a phenomenon (i.e., the variation might have a different basis: language contact, internal transfer or other sociolinguistic reasons). For the phenomenon under focus, we therefore need to consider that there might be a different distribution of variants in different manuscripts, but that it is not always motivated by or directly related to the evolution of the register (for details, see Živov 2006: 28–30) in order to adequately cope with the complexity of noncanonical object marking.

### 3.2. Competing explanations for the origin of NOCs

Theoretical works on NOCs in Russian can be grouped into two main models offering different explanations for the origin of the construction and the grammatical status of its NOM-arg. The first model is called the “traditional (functional) approach”, the second is the theory of a contact-induced case specification, as proposed by Timberlake (1974). Most traditional studies have a descriptive character and focus on the functional explanation of the historical and dialectal use, its restrictions and development. This chapter summarizes the main assumptions of these approaches. Chapter 3.3.4 additionally points out the observations of the most recent studies from a minimalist perspective.

#### 3.2.1. The traditional approach: Early descriptions

The first description of NOCs can be attributed to Katkov (1845), followed by Lavrovskij (1852), Leskien (1870), and Miller (1874).<sup>15</sup> These early accounts observed that NOCs were already attested to in 13<sup>th</sup> c. texts (e.g., in the Smolensk treaty of 1229) and were widely distributed in the later periods from the 15<sup>th</sup> to end of the 17<sup>th</sup> c. According to these authors, the use of the “nominative in the object position with an independent infinitive” (Rus.: *pri neopredeljenom nakloneniji*) was common from the Old Russian period onwards (since the 12<sup>th</sup> c., cf. Buslajev 1881: 375). Some authors (Leskien 1870; Miklosich 1883) assumed that, originally, the NOM-arg must have been licensed as the subject of the construction. However, in their explanations they did not account for the mechanism of case licensing, that is, the interaction of case marking and the notions of subject and object,<sup>16</sup> and the emergence of the construction in Russian. Most of traditional studies limited their interest to constructions with either an independent or dependent infinitive (i.e., PiCs or SeCs-1 according to Chapter 2.1.3)

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<sup>15</sup> The traditional point of view is taken in the works of Vostokov (1863), Potebnja (1874, 1888, 1958), Popov (1881), Buslajev (1881), Šachmatov (1903, 1925), Ovsjaniko-Kulikovskij (1905), Bicilli (1933), Borkovskij (1944, 1968), Georgieva (1949), Lomtev (1949, 1956), Kotkov (1952, 1959, 1974), Sokolova (1952, 1961, 1962), Černych (1953), Sprinčák (1939, 1941, 1960), Staniševa (1966), Isačenko (1967), Havránek (1968), Filin (1972), Stecenko (1974), Stepanov (1984), Unbegaun (1935), Krys'ko (1994, 2006), Potebnja (1958), Kiparsky (1960, 1967, 1969), Jacobsson (1964), Larin (1963, 1975), Staniševa (1966), Sumkina and Kotkov (1967), Veenker (1967), Havránek (1968), Sabenina (1978), Gippert (1983), Stepanov (1984), Zaliznjak (1995, 2004), etc.

<sup>16</sup> In the words of Leskien (1870: 169): “In terms of phonetics and syntax for the feminine *-a* stems, the nominative form as acc.sg is completely inexplicable. It is not possible to call it a mistake because it happens too often”.



and considered the use of the nominative with a finite verb a later development (e.g., the SeCs-2).<sup>17</sup>

Lavrovskij (1852)<sup>18</sup> probably gives the earliest detailed comments on the use of NOCs in early and modern North Russian dialects. He classified them as an Rus.: *idiotizm russkij* “Russian idiom”, pointing to a certain degree of idiomaticity in the sense that the construction is combinatorially restricted and that its modal meaning of “necessity” does not fully derive from its components, but from an interplay of its elements. Lavrovskij (1852) characterized the Old Russian period as being generally shaped by variation and “freedom” of expressions (Rus.: *svoboda v vyraženiach*). In his opinion, the use of NOCs was not typical for Old Church Slavonic texts, but rather came from spoken language and was originally used in Old North Russian dialects (especially in the Novgorod dialectal area), before spreading into written Russian from the 15<sup>th</sup> c. onwards. Lavrovskij (1852) considered PiCs to be limited to the feminine *-a* stems and thought that the NOM-arg only occurred with independent infinitives. According to him, the use of the construction was restricted by its specific pragmatic function, so that in 19<sup>th</sup> c. Russian it was considered an archaism.

### 3.2.2. The traditional approach: NOCs as a Russian innovation

From the traditional viewpoint, the NOM-arg in NOCs evolved from the existential construction containing a NOM-theme, an explicit existential verb *est* ‘there is’ and a DAT-possessor (purposive dative). The reinterpretation of the NOM-subj as a NOM-obj in specific infinitival constructions was determined by the grammaticalization of infinitive verbs as predicates. Originally, infinitive verbs represented the purposive dative of an action nominally (verbal noun) and therefore only carried minimal verbal features, so they were neutral with respect to voice. This assumption was supported by Haspelmath (1989), who also proposed that the development of the infinitive from purposive action nominals has a universal character and is a widespread phenomenon in many European and non-European languages. The shift from

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<sup>17</sup> Alternatively, some authors (cf. Sprinčák 1941: 35) proposed that the NOM-arg was originally used with a gerund. However, Sprinčák (1941) illustrated this use by a later example from the text *Uloženie* “code of law”, which dates from the 16<sup>th</sup> century. Šachmatov (1925), on the other hand, suggested that sentences with a gerund, an imperative, or a dependent infinitive were later developments that had evolved from NOCs (cf. also Timberlake 1974; Dunn 1978).

<sup>18</sup> The Language of the Northern Russian Chronicles (1852, section The Distinctive Features of the Old Russian Language, pages XX–XX<sup>18</sup>)

NOM-subj to NOM-obj in NOCs was first reconstructed by Potebnja (1<sup>st</sup> edition published in 1874, reprint in 1888 and 1958) and later elaborated by his student Popov (1881). It was widely accepted in later investigations by Ovsjaniko-Kulikovskij (1905), Borkovskij (1949), Borkovskij & Kuznetsov (1965: 457), Jacobsson (1964), Staniševa (1966), Kiparsky (1967), Filin (1972: 480), Stepanov (1984), Krys'ko (1994), and Heine (1997) and also adopted and extended by the most recent studies, for example, Ambrazas (2001), Kwon (2009), and Jung (2010) (cf. Chapter 3.3.4).

The model assumes that NPICs were of Indo-European origin and derived from a construction consisting of the dative possessor construction (i.e., *mihi est* 'to me there is') and a purposive action nominal (verbal noun) in the DAT (Heine 1997; Ambrazas 2001; Jung, 2010). Potebnja (1874, 1888) based his explanation on the interdependence of case and main predicate, interpreting the Slavic infinitive ending with *-ti* (*-t'*) as a purposive action nominal in DAT, and the Slavic infinitive ending *-tb* as a deverbative noun in the ACC. According to Potebnja (1874, 1888), (32) can be reconstructed from an existential construction with the copula *est* and with a purposive adjunctive clause (in the DAT) like in the hypothetical initial construction (33) that is not attested in my material. He assumes that the "purposive adjunct must have been a verbal substantive in an oblique form [i.e., in the oblique dative case, U.Y.]" (Jung 2010: 389):

(32) Letter from Smolensk, 1229, example cited in Potebnja (1958: 406):

<i>takova</i>	<i>pravda</i>	<i>ouzbati</i>	<i>Rusinu</i>
such – NOM.F.SG	right – NOM.F.SG	to-take -INF	Russian – DAT
'such right [is] for a Russian to take'			

(33) *takova*                      *pravda*                      *est'*                      *Rusinu*                      *vzbətiju*

such	–	right – NOM.F.SG	be	–	Russian – DAT	taking – DAT
NOM.F.SG			3.SG			

'such right is for a Russian to take'

(33) illustrates the presumptive original existential construction, which is a personal copula construction (Rus.: *opredeljenno-ličnoe*) in which the NOM-arg is the subject of the predicate (without agreeing with it) and which includes two DATs that are independent of each other: *Rusinu* (possessive dative) and the purposive actional noun in the DAT *vzbətiju*, which later developed into the infinitive verb. (34) illustrates the next transitional stage, after the purposive

dative was grammaticalized to become the verbal category infinitive. In this stage, the verb–object relationship is created because the infinitive verb required an overt object. Moreover, the copula *est*’ was eliminated because the meaning of the construction shifted from an existential to a modal construction with a NOM-obj. The “historical” nominative case marking for the object was preserved, as in (34) and as found in the Old Russian example (32). This step, however, was not explained in any detail by Potebnja (1874, 1888).

(34)	<i>takova</i>	<i>pravda</i>	<i>Rusinu</i>	<i>vzěti</i>
	such - NOM.F.SG	right NOM.F.SG	- Russian DAT	- to-take - INF
	‘such right [is] for a Russian to take’			

This approach interpreted the reanalysis of a NOM-subj as a NOM-obj in the context of the differentiation process of the noun and verb functions due to the contamination of the NPiCs with other constructions (e.g., the NOM + DAT construction or the DAT + infinitive construction).<sup>19</sup> Moreover, Potebnja (1874, 1888) showed that the case-marking mechanism of an object or subject in the Old Russian period correlated with the development of the passive voice: “Voice is the relation of the subject to the object, or more precisely: the relation of the predicate to the subject and complement” (Potebnja 1941: 201), or, in other words: voice is an aspect of verbal meaning (i.e., depending on verbal semantics). Therefore, verbs predict the presence or absence of the object and, in later periods, also the quality of the object. Other constructional variants with a modal predicative (e.g., *nado* ‘it is necessary’) or an impersonal verb (e.g., *dostoit* ‘it is fitting’) – SeC2 – must have been derived later by extension from the basic type with the independent infinitive. This approach does not explain the lack of predicate agreement, or which kind of change took place in the grammatical relation of the arguments then. Therefore, it is not clear how the NPiCs attested to in Old Russian relate to the SiCs found in modern dialects.

<sup>19</sup> While accepting the initial subject status of the NOM-arg with an independent infinitive, A.A. Šachmatov (1903) disagreed with Potebnja’s (1888) hypothesis that the NOM-arg was the subject of the infinitive. Referring to later dialectal examples with the modal predicate *nado*, *nužno* “need”, he claimed that the NOM was the subject of the modal word/verb. This interpretation was adopted in later investigations (e.g., Černych 1953; Bicilli 1933; Lomtev 1949, 1956). However, Šachmatov’s (1903) theory of the origin of the NOC has been criticized in later studies (cf., e.g., Georgieva 1949; Lomtev 1949; Dunn 1978), mainly because his explanation is only based on modern Russian dialects and can possibly explain the use of the construction, but not its origin.

Lomtev (1949) generally agreed with the reconstruction suggested by Potebnja (1888), but believed that the original construction had no copula and that constructions with an auxiliary verb were later innovations representing original biclausal constructions (cf. (35), with the past tense auxiliary *bylo* ‘it was’).

(35) Mor. 16<sup>th</sup> c.:

<i>A</i>	<i>pachat'</i>	<i>de</i>	<i>bylo</i>	<i>emu</i>	<i>ta</i>	<i>pašnja</i>
and to-plow - INF	there	be - AUX.PST	he - DAT	this -	land - NOM.F.SG	

‘and this land was necessary for him to plow’

Therefore, Lomtev (1949) suggested that the initial monoclausal construction contained the NOM-arg, which represents a subject controlling the DAT purposive adjunct without a copula. This construction can be presented as in (36). After the purposive dative was grammaticalized to represent an infinitive, this construction transformed into the NPiCs, as in (37).

(36) example cited in Lomtev (1949: 20):

<i>jazva</i>	<i>dostupnaja</i>	<i>videniju</i>
wound - NOM.F.SG	available	seeing - DAT

‘The wound is possible to see / one could see the sore’

(37) The writings of Lukjanov from the 17<sup>th</sup> c. cited in Lomtev (1949: 13)

<i>ruka</i>	<i>u</i>	<i>nego</i>	<i>levaja</i>	<i>probita</i>	<i>kopiem</i>
hand	by	his	left	perforate	pike

<i>jazva</i>	<i>vsja</i>	<i>videt'</i>
wound- NOM.F.SG	all - NOM. F.SG	to-see - INF

‘His left hand was perforated by the pike, and the complete wound can be seen’

Thus, the infinitive took on an active meaning, leading to a loss of control relations between the nominal arguments. Consequently, the purposive DAT gradually lost its semantic properties of a controlled argument marked with an oblique case. It acquired the semantic features of a verb to become the predicate (Rus.: *skazujemoe*) whereas the NOM turned into its surface subject (Rus.: *podležaščije*). After the original noun–infinitive relation had developed into a

subject–predicate relation, a need to express the temporal relation emerged. This led to the addition of an auxiliary verb to express the tense category as in (35) (cf. Lomtev 1949: 20–21).

### **3.2.3. The traditional approach: Focus on the Indo-European heritage**

In Popov’s (1880) opinion, the use of the NOM in infinitival constructions was typical for all Indo-European languages and their dialects and existed at the time when there was no difference between passive and active infinitives. This assumption is supported by evidence from recent typological studies on Baltic languages (cf. Ambrazas 2001). Popov (1880) also used this fact to explain case variation in different historical periods. He considered the case-marking strategy for NOM and ACC to result from the development of the voice category and the active–passive opposition. Similarly, Stepanov (1984) analyzed the anomalous appearance of an infinitive with a “canonical” NOM-arg in the context of other universal processes in Indo-European languages. He treated the development of the NPiCs in Russian as part of a universal tendency in the use of the nominative-accusative case with *–a* stems that is traceable in other Indo-European case systems. In his framework, the NPiCs gradually emerged with the change of case-marking strategies and the development of the animate/inanimate opposition (cf. Chapter 3.3.2).<sup>20</sup>

Krys’ko (1994) shared this view and explained the development of noncanonical NOM marking of objects in the context of the emergence of the category of animacy in Russian, which led to the specification of the case marking of a (direct) object. In opposition to Potebnja (1958), he assumed the Russian NOCs to be of Indo-European origin and did not exclude the possibility of NPiCs having originally developed from monoclausal sentences without a copula, in which the NOM was a surface subject. In this context, he referred to the Rigveda, in which both monoclausal and biclausal sentences existed (cf. Krys’ko 1994: 192). Like Potebnja (1949) and others, he believed that, in such constructions, the NOM-obj was originally a NOM-subj. Krys’ko (2006) explained the extension of the use of the NOM in other syntactic environments and its variation with the ACC as a result of the simultaneous development of the category of animacy in the history of Russian (cf. Chapter 3.3.2). He also linked it to the rise of the voice category as well as to the differentiation in the case-marking strategies that included case

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<sup>20</sup>The nearest parallel constructions are, in his opinion, the modal constructions from Lithuanian and Latvian with an infinitive and a purposive dative (see examples in Stepanov 1984: 128–129, also Grillborzer 2014).

specification in ACC-obj marking in later Old Russian and especially in the Middle Russian period.

The emergence of these new grammatical categories in Russian will be dealt with in greater detail in Chapter 5.5. At this point, it is important to keep in mind that the NOM–ACC case marking of the subject and object is closely connected to the development of the category of animacy in Russian. Krys’ko (2006), who also maintained the *independent case typology* suggested by Popov (1888), assumed that the ACC originally had a very broad sense with “independent” circumstantial-attributive functions. Its function as a direct object marker resulted from a more recent process of case specification and functional differentiation. Popov (1880) rejected the idea that the distinction between the subject and the object was a crucial factor in the rise of the GEN–ACC marking of animate nouns (Krys’ko 1994: 156–158). According to him, the ACC constituent as the DAT experiencer was not an argument of the verb in the beginning but acquired its object properties only in the later Middle Russian period (Krys’ko 1994: 250–252). The later ACC (direct) object case marking then derived from the “circumstantial-attributive” accusative meaning (Rus.: *razvitie ot obstojatel’svennogo k prjamomu-objektnomu značeniju*) and was not based on the quality of the predicate (transitive/intransitive) or its semantics. In the prehistorical stage, a morphological ambiguity between different cases should be assumed; this was based on the animacy of the underlying object in later stages. According Krys’ko (1994, 2006) this change cannot be dated earlier than at the end of the 14<sup>th</sup> c. Therefore, the subject and object were not differentiated by case marking (as already visible in some of the examples in Chapter 2.1.4). Only when the category of animacy was developed did it result in a reanalysis in the Middle Russian period and in the modern dialects: the NOM started to be used as an object, which, together with the infinitive verb, provided for a modal meaning, or was used in specific temporal clauses like: *prožit’ zima* ‘to spend all the winter’, *prorabotat’ vsja nedelja* ‘to work all week’ (examples from Kuz’mina & Nemčenko 1964: 67). Thus, especially in the earliest periods, case variation in NOCs cannot be used as an argument for the object status of the NOM-arg, because NOM–ACC case marking as well as the subject–object correlation were not developed before the end of the 14<sup>th</sup> c. The coexistence of both cases in the same syntactic environments can be explained semantically rather than by syntactic factors, predicate–noun agreement or their status as the subject or object of the construction.

Moreover, Krys'ko (1994) criticized a supposition widely adopted in diverse syntactic theories, namely that the anaphoric binding of the antecedent of a reflexive pronoun like *svoj(a/e)* 'one's own' always provides evidence that its head noun is not the subject. Krys'ko (1994: 13–14) claimed that, especially in the Old Russian period, the reflexive *svoj(a/e)* did not unambiguously express a reference to the subject of the sentence, illustrating the use of the reflexive modifier with the NOM as a former subject from texts dating from the 11<sup>th</sup> to the 15<sup>th</sup> c. (taken from the dictionary of Sreznevskij III, 282). The following examples demonstrate the use of the reflexive pronoun *svoj(a/e)* with nouns in the NOM that represent the grammatical object in (38), but also could be used as a subject (39) and (40) in the sentences.<sup>21</sup> More examples of the use of the reflexive modifier with the NOM as a former subject you could find in SRJ (Vyp.23: 189-192)<sup>22</sup>:

(38) Ostromirovo evang. 1056-1057:

<i>Posla</i>	<i>k</i>	<i>nemu</i>	<i>žena</i>	<i>svoja</i>	<i>gljuši</i>
send - PAST.	to	him	wife-NOM.F.SG	own - REFL	saying-PRT

'he sends [to] him his own wife, saying'

(39) Ipat. let.:

<i>My bychom</i>	<i>toba</i>	<i>radə</i>	<i>pomogla,</i>	<i>no obidit'</i>	<i>nas</i>
we be-IMPF.Pl.	you	for	help	but offend-INF.	us

<i>stryj svoj Mež'ka</i>	<i>iskati</i>	<i>pod nami volosti</i>	<i>i upravu</i>
old own-REFL Mezhka	search-INF.	under us land	and justice

'We have been helping you, but you offended us, your [own] old Mezhka looked for our land and justice'

<sup>21</sup> In a later study, Timberlake (1996: 13–14) discussed the use of the reflexive possessive pronoun *svoj* in Old Russian and its ambiguous binding properties, and suggested that, although this could not be used as an indicator for the object status of the argument, the distribution of variants with *svoj* and an ACC- or NOM-arg could be statistically relevant. For this book, it is nevertheless important that the binding principle does not seem to be relevant, especially for the Old Russian period (until the 15<sup>th</sup> c.), for identifying the subject or object status of core arguments. The use of reflexive pronouns was also attested to in modern Russian and has been analyzed in several studies (such as Rappaport 1986; Czeczulin 2007) that suggest that it could be explained with idiomatic usage and semantic reference, but this issue is beyond the scope of the present study.

<sup>22</sup> SRJ (Slovar' russkogo jazyka XI~XVII vv. Vyp.23 (съ-Sdymka), Moskva, Nauka 2000)

‘This is my own heart’

(40) Dog. Gr., 1330 (from Krys’ko 1994: 14)<sup>23</sup>:

<i>A</i>	<i>svoj</i>	<i>knjaz’</i>	<i>tamo</i>	<i>kaznit’</i>	<i>ego</i>
and	own-REFL	duke-NOM	there	execute - INF	him

‘and he is to [to be] execute[d] by his own duke there’

With the above sentences, Krys’ko (1994) wanted to demonstrate that the binding of the reflexive pronoun *svoj(a/e)* in Old Russian did not necessarily entail an unambiguous reference to the subject of the construction.

Another issue with respect to NOCs, as already mentioned in Chapter 2, are the geographical restrictions and distribution. Borkovskij (1944) assumed that in the Old Russian period, the NOC construction must have originated as a dialectal syntactic feature of Novgorod, Smolensk and Polotsk. He explained the later attestation of the construction in the west Old Russian documents (it was used in official, trade and legal documents especially frequently) and in the Muscovite chancellery language as having been influenced by the expansion of the Novgorod republic (and colonization of the east and north regions) due to the trade relationships. Also, the use of the NOC construction expanded into other regions and became the norm or at least a feature of chancellery language there, too (Jaroslavl’, Nižnij Novgorod) (Borkovskij 1949: 345).

Another interpretation of the origin of NOC in Russian has been suggested by Timberlake (1974), the so-called *Impersonal theory*. This publication was a turning point regarding the issue of non-canonical object marking in the history of Russian. In the following, I briefly summarize Timberlake’s five main ideas that Timberlake that contradicted the traditional approach towards NOCs.

### ***Main Assumptions: Nominative Object Rule***

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<sup>23</sup> Also, Holvoet (2003) assumed that the control-reflexive test could be an “equivocal test” for Latvian.



First, he considers the use of NOCs in Old Russian to be of “perfect regularity” until the 17<sup>th</sup> century and syntactically motivated by its syntactic environment which in his definition is “systematically impersonal” (Timberlake 1974:37). Timberlake (1974) refers to the underlying rule as the “Nominate Object Rule” for Old Russian which is like some Baltic languages. The infinitive is then interpreted as the sentential subject of the matrix sentence. Following his assumption, the infinitive modal construction is systematically impersonal under any analysis, because the sentence lacks a grammatical subject. In this case, the matrix predicate is either covert or a dummy element (cf. Timberlake: 1974: 24). In other words: whenever the environment is “systematically impersonal” (i.e. lacking a grammatical subject), the direct object is marked by the nominative as the “default case”; otherwise it requires accusative marking.

### *Language contact*

Second, Timberlake argues (as already suggested even earlier by Larin (1963) against the hypothesis that the NPIC was a common Slavonic phenomenon setting three facts against it:

- a) the period of the use of the construction in other regions of Russian except for the North Russian was short.
- b) “the construction is occasionally misused in documents from outside the NR [North Russian, U.Y.] area, during the period when it was used correctly in NR documents”.
- c) the construction is apparently not attested in contemporary dialects from these regions (Timberlake 1974: 127–129).

Timberlake based on the theory of Larin (1963), explains the use and the origin of the NPIC in Old North Russian as a contact-induced phenomenon. Comparing similarities in the areal distribution and structural properties of the occurring constructions in Lithuanian, Latvian dialects and early North Russian dialects, he concludes that this construction evolved as a “syntactic borrowing” from some West Finnic language. In both languages then, nominative object marking had a syntactic character which overrode the morphological differences between the languages involved in the use of the nominative (see more in works by Senn 1966, Larin 1966, Ambrazas 2001, Seržant 2016 etc.). Just to mention some of those differences: In Lithuanian and Latvian the nominative is used for objects in certain constructions: 1) in Lithuanian dialects *nominative object + gerund*, 2) in Latvian dialects *nominative object +*

### *Timberlake's classification of Old Russian constructions containing nominative object*

(41)    *a*                 [*tu gramotu*]                 *knže*                 *otjelъ*                 *esi*  
                 and                 this writ - ACC.F.SG    prince - DAT                 take - PAST.2.SG  
                 ‘this writ, prince, you took away’

<i>a</i>	<i>ta zemlja</i>	<i>očistiti</i>	<i>[Matfeju i Samuilu]</i>
and	this-land - ACC.F.SG	clean - INF	Matthew and Samuel - DAT

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'and it is for Matthew and Samuel to clear this land'

Babby (1991) formulates Timberlake's findings in terms of Government and Binding (GB) theory and shows that the use of the nominative or accusative case is predictable according to control theory. Assuming that "that infinitive clauses have PRO subjects and clausal structure (i.e.  $[[\text{PRO}]_{\text{NP}} [\text{VoNP}]_{\text{VP}}]_s$ , where V=infinitive)" (Babby 1991: 43) case variation is explained as follows: The noun phrase that is the direct object of the infinitive is assigned the accusative if the PRO subject of the infinitive clause is controlled by the nominative subject of the matrix verb. If this is not the case, then the direct object is assigned the nominative. Chapter 3.3.4 elaborates on Babby's (1991, 1994, 2009) accounts in greater detail.

The five different constructional types which fulfill the conditions of the nominative object rule according to Timberlake (1974:7–32) are:

- I. Subtype I represent sentences including an independent infinitive ("where the infinitive is not governed by any other part of speech", Timberlake 1974:7), i.e. in my classification NPiCs.

(43) example cited by Timberlake 1974:8 from Sm. gr., A, 1229:

<i>Aže</i>	<i>budět</i>	<i>xolъpъ</i>	<i>ubitъ, a</i>
if	AUX	slave	killed, than
<i>grivna</i>	<i>ser'bra</i>	<i>zaplatiti</i>	
Grivna - NOM.F.SG	silver	to-pay - INF	

'If a slave is killed, it is necessary to pay one grivna in silver'

As a "special kind of independent infinitive construction" he also mentions example (44). This sentence includes an object in the nominative (*muka* 'flour', *kvašnja* 'sponge') and an infinitive verb (*sejati* 'sift', *postaviti* 'set') that is introduced by an overt complementizer (*kak* 'how') and is embedded as an essential complement to the finite verb (*by znala* 'knew'):

(44) example cited by Timberlake 1974:12 from Dom. 16<sup>th</sup> c.:

*i sama by znala kak muka sejati,*

and herself know- COMP flour - NOM.F.SG to-sift - INF  
PAST.3.F.SG

*kak kvašnja postaviti, pritvoriti,*

COMP sponge - NOM.F.SG to-set-INF to-prepare - INF

*i zamesiti*

and to-knead - INF

‘And if she knew by herself how to sift flour, how to set the sponge, and to prepare and to knead the dough’

On the other hand, a dependent infinitive “is directly governed by an overt higher predicate; it is never introduced by a complementizer” (Timberlake 1974:12).

- II. Subtype II represents sentences including a noun marked with the nominative, which is an object of an infinitive which again is “the subject” (in the sense of Timberlake) of the matrix verb as in example (45) the verb *dostoitʹ* ‘it is fitting’, i.e. in my classification the SeCs-1 (a). The following example cited by Timberlake (1974: 12) from Dom. 16<sup>th</sup> c.):

- (45) *ino dostoitʹ mužu žena*  
and fitting - 3.SG husband - DAT wife - NOM.F.SG  
*svoja nakazyvati*  
his - NOM.F.SG to-punish - INF

‘it is fitting for a man to punish his wife’

This subtype also includes constructions in which the dependent infinitive is the subject of a nonverbal modal predicate like *vol'no* ‘it is free’ as in example (11) already mentioned in Chapter 2 or as in example below *nadot'* ‘should’ as in the modern dialects (46), i.e. in my classification the SeCs-1 (a):

- (46) example cited by Timberlake (1974: 106) from Mansikka (1912: 131):

<i>nadot'</i>	<i>exat'</i>	<i>pachat'</i>	<i>pašnja</i>
should - MOD	to-go - INF	to-plow - INF	field - NOM.F.SG

'it is necessary to go to plow the field'

III. Subtype III represents sentences including a noun marked with the nominative with an infinitive which is the subject of a past passive participle as in the example (19) already cited in chapter 2, i.e. in my classification the SeCs-2 (c).

IV. Subtype IV represents sentences including a noun marked with the nominative with an infinitive which is controlled by other infinitives as in (47) the infinitive *dati* 'to give' which is controlled by another infinitive verb *veleti* 'to order', i.e. in my classification the SeCs-1 (a).

(47) example cited by Timberlake (1974: 106) from RLA, no. 399, 1601:

<i>Ta gramota</i>	<i>veleti</i>	<i>im</i>	<i>dati</i>
this-writ - NOM.F.SG	to-order - INF	them - DAT	to-give - INF

'This writ of request it is necessary to order them to serve'

### ***Evidence for objecthood.***

Fourth, in Russian case licensing is not reason enough to conclude that a certain case indicates the object or subject status of an argument. Timberlake provides evidence in favor of the object analysis of the nominative in NOCs referring to the following facts: the lack of verb agreement, the alternation of the nominative and the accusative case, as well as a parallel use of the nominative (*Orda* 'translation' in (48)) in the same sentence with a genitive of negation in the first part of the sentence (for more examples see Staniševa 1966: 6, Bicilli 1933: 202–203, Sprinčák 1960:173–175, Timberlake 1974:75–76).

(48) Akty arch. eks., no. 29, 1435 cited from Timberlake (1974:75):

<i>A Ordy</i>	<i>mi</i>	<i>ne</i>	<i>znati,</i>	<i>a</i>	<i>Orda</i>
horde- GEN.F.SG	you- DAT	- INF	not to-know -	but	horde - NOM.F.SG

<i>znati</i>	<i>tobě</i>	<i>Velikomu</i>	<i>Knjazju</i>
to-know - INF	you - DAT	Grand-DAT	prince-DAT

‘it is not for me to know the horde, but it is for you, being a Grand Prince, to know the horde’

Moreover, based on the classification of syntactic environments with nominative object in Old Russian Timberlake proposes eight properties of the nominative in the nominative with infinitive construction which should show that nominatives represented even in the prehistorical period the direct object of the sentence.

- 1 Lack of the agreement in predicate
- 2 Lack of a personal grammatical subject
- 3 Recursive
- 4 The use of the nominative with gerund
- 5 Restriction to specific nominals
- 6 The lack of alternation with another oblique cases
- 7 The use of nominative for “specificatory accusatives”
- 8 Reflexivization

Following I summaries just briefly them and for more details see in Timberlake (1974: ch.4.4):

- 1) the **lack of agreement** in predicate shows that nominative licensed an object
- 2) The use of the nominative was restricted to specific syntactic environments with independent infinitives. And since independent infinitive lacks the possibility of a personal grammatical subject, the use of the nominative objects was restricted to “**systematically impersonal contexts**”
- 3) In Timberlake’s (1974: 142-143) opinion, the property of a systematic impersonality, is recursive (“an infinitive embedded in a systematically impersonal environment will also be systematically impersonal”), which allows him to define five different subtypes of syntactic environments containing a nominative object for Old Russian (see below).

- 4) he used also the fact that the **nominative occurs also with gerund** (non-finite verb form) which subordinated to infinitive and accusative was used if the gerund was governed to finite verb as an argument for object status of the nominative
- 5) the use of the nominative in above mentioned environments was also restricted to certain nominals and could not be explained by morphological or declensional properties of the nominals (since it applies to all nominals except masculine animates and pronouns), but operates according to the grammatical **category of animacy** (detailed explanation according see in Timberlake 1974:ch. 6.5.5). And according to Timberlake this group of nominals signed only objects. In his approach, Timberlake (1974:71) connects the “animacy constraint”, which predicts case licensing of the accusative instead of the nominative, with the question whether the nominative object rule only applies to feminine nouns of the *-a/-ja* type. He argues that the nominative object rule applies to all nominals that were not affected by the “accusative animate rule” and thus to all except for animate masculine nouns or pronouns. Timberlake differentiates three declension classes which were integrated in the application of the nominative object rule and with which the nominative and the accusative cases of nominals (noun, adjectives, pronouns and also numerals) can be classed (cf. Timberlake 1974: 55–58). Only the first-class of nominals distinguishes between the nominative and the accusative cases (with the ending *-a/-ja* for the nominative and the ending *-u/-ju* for the accusative). In the second class, the two cases are ambiguous and can be identified only if the nominal governs modifiers (e.g., with demonstratives: *ta* [pron.fem.nom] *ruxljad’ vzjati* ‘it is to take that property’). The third class, in Timberlake’s opinion, is a later development in which both cases can be distinguished in a “special way”, i.e. driven by the so-called “animate accusative rule”.<sup>25</sup> This rule spreads to the masculine singular animate nouns and later to the personal pronouns (Timberlake dates this process to the 15<sup>th</sup> century). According to the rule, animate nouns in the accusative have the same form as their genitive while the inanimate nouns stay in the nominative form. To illustrate the regularity of this use in the Old Russian period, he gives an example from the Ipatian chronicle (1149) where this rule has been realised:
- (49) example cited by Timberlake 1974: 65 from from Ipat. let., (1. 136, 114):

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<sup>25</sup> This term was adapted by Timberlake from Lunt (1965) as he notes in footnote 26 (Timberlake 1974:235).

*I tobě bylo v̋ěxavši v Kievě*  
 and you-DAT AUX. enter - PTCP in Kiev  
*brat moego jati, i sna*  
 brother – my - ACC-GEN to-take - INF and son - GEN.ACC  
 NOM/ACC.M.SG

*moego i žena moja, domъ moj vzjati*  
 my - acc-gen. and wife-my- house-my- to-take - INF  
 NOM.F.SG NOM.M.SG

‘it was in mind for you, having entered Kiev, to seize my brother and my son and my wife, and to take my house’

In the first part of the sentence with the infinitive *jati/vzjati* ‘to take’, which depends on the gerund *v̋exavši* ‘entered’, the animate nominal group *brat moego* ‘my brother’ is in the accusative-genitive case and the nominal group *domъ moj* ‘my house’, because it is inanimate, must be in the nominative. Nouns like *žena* ‘wife’, *doči* ‘daughter’, *mati* ‘mother’, or personal names like *Orina*, were defined as grammatically inanimate (cf. Timberlake, 1974: 69–71). This also works for all personal pronouns which are marked with the nominative case, as in (50) and (51):

(50) example cited by Timberlake 1974: 106 from Nap'erskij (1868, no. 399, 1601):

*I tobě emu isprava učiniti*  
 and you – DAT. he – DAT. justice - NOM.F.SG to-do - INF  
 ‘it is necessary to do justice’

(51) example cited by Timberlake (1974: 66) from SGGGrD 33, 1388

*Tym svoja služba služiti*  
 they – DAT. own - NOM.F.SG duty - NOM.F.SG to-serve - INF  
 ‘For them it is necessary to know their own duty’



6) the fact that nominative do not appear for oblique cases, for example, genitive, but just where accusative appears, was used also as an argument for its object status. He calls it “**oblique case constraint**” (Timberlake 1974: Ch. 4.3.6)

7) “**specificatory accusatives**” (i.e. accusatives “which are used as not objects in the strict sense of the term” (specificatory complements) are used in nominative cf. Timberlake (1974:82))

8) **reflexivisation** (the control of a reflexive pronoun, which in Old Russian operates from the Dative Subject and not from the nominative noun)

Timberlake concludes that the application of the nominative object rule in the history of Russian was not restricted by “purely morphological information”, or the morphological declension class, of nominals, but rather depended on the “grammatical category of animacy” of the noun (1974: 67), which he later calls the “animacy constraint”. Timberlake (2014: 1678) summarizes the relevant morphological and syntactic properties in the following table 1:

**Table 1** Structural properties of the nominative object of infinitive (Timberlake 2014)

Syntactic context: noun is patient of...	<i>a</i> -stem singular*	Other declensions**	Masc. animate singular	pronoun
Finite personal verb	ACCUSATIVE	NOMINATIVE = ACCUSATIVE	ACCUSATIVE = GENITIVE	ACCUSATIVE = GENITIVE
Personal infinitive	ACCUSATIVE	NOMINATIVE = ACCUSATIVE	ACCUSATIVE = GENITIVE	ACCUSATIVE = GENITIVE
Impersonal infinitive	NOMINATIVE	NOMINATIVE = ACCUSATIVE	ACCUSATIVE = GENITIVE	ACCUSATIVE = GENITIVE

\* also Novgorod *o*-stem NOM.SG {-e} ≠ ACC.SG {-o}; adjectives modifying FEM.SG. *i*-stem

\*\* includes *o*-stem > NOM=ACC.PL {-y} after merger of NOM.PL \*{-i}≠ACC.PL \*{-y}

However, as I will discuss in more detail in chapter 5, empirical evidence does not support this assumption. If one examines different Old Russian texts as well as examples from Middle Russian texts, it can be seen that in the same environments and with the same nominals the accusative case was also used regularly (and actually more frequently than the nominative case), as in the following examples taken from my own sub-corpus from (52) and (53):

(52) SGGrD N 15, 1327:

<i>tě</i>	<i>tomu</i>	<i>dělu</i>	<i>učinjat'</i>	<i>ispravu</i>
they - DAT	this - DAT	matter - DAT	to-do-INF	justice - ACC.F.SG

‘it is for them to do justice to him on this matter’

Or, in another variant in the position before the verb (from now on: “pre-verbal position”):

(53)	<i>mně</i>	<i>ispravu</i>	<i>učinjat'</i>
	I - DAT	justice - ACC.F.SG	to-do - INF

‘it is for me to do the justice’

Moreover, Dunn (1978) criticizes Timberlake’s explanation for not clarifying why in the oldest available sources, masculine animate *-a/-ja* type nouns distinguish the nominative and the accusative with the infinitive, whereas feminine nouns do not.

According to Timberlake (1974), the nominative object rule was reanalyzed in a later period and changed from a syntactic to a morphological nominative object rule.<sup>26</sup> Therefore, the prototypical structural properties of the NPICs radically changed so that in modern North Russian dialects, the construction is not used in the same way anymore and the nominative object is often used with finite verbs (cf. Kuz'mina & Nemčenko 1964). Therefore, by

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<sup>26</sup> “...there are actually two kinds of historical changes operating: a reanalysis and the actualization of the reanalysis through the elimination of unmotivated restrictions on the reanalyzed rule. These two changes represent instances of the two basic kinds of historical change defined by Andersen (1973). The reanalysis is an instance of abduction and the actualization is an instance of deduction. The history of the nominative object rule shows that the distinction between abductive and deductive changes is relevant for syntactic change as well as for phonological change. As Andersen argued (1973: 788), the reanalysis must have receded and in a sense caused the actualization...” (Timberlake 1978:118)

comparing the use of NPiCs in early and later sources as well as in the modern North Russian dialects, Timberlake concluded that the mechanism of case assignment underwent *reanalysis* from a syntactically motivated rule to a morphologically unmotivated rule. He specifies that the use of a nominative object in the later period was an “adaptive rule” stating that the use of the NOC construction was restricted to specific sorts of texts or contexts. In his opinion, the nominative object rule was active until the 16<sup>th</sup> century, the first indications of its disappearance being the occurrence of examples that, as in (54), show a discrepancy in the case form between the head noun (*ta skotina* ‘that cow’) and its modifier in the accusative (*vsju* ‘all’), a phenomenon that he found first in the text written by Posoškov dating from 1724 (cf. Timberlake (1974:34)):

(54) Pos. 1724, cited from Timberlake (1974: 75):

<i>Vzjat'</i>		<i>vsju</i>		<i>ta</i>		<i>skotina</i>		<i>na</i>	<i>gosudarja</i>
to-take	-	all - ACC.F.SG		that-NOM.F.SG		cattle	-	for	governor
INF				NOM.F.SG					

‘It is necessary to take all those cows for the governor’

Timberlake also notes that in the later Middle Russian period, for the first time, it seems that the use of nominative object was not restricted to systematically impersonal as environments anymore but was also regularly used in other contexts. In this context, he points to contexts with an “isolated” nominative object in a *figura etymologica* and a “nominative in list” (cf. chapter 2.1.3). That, however, does not equal an “arbitrary use of the nominative as the object”. Based these facts, Timberlake supposes that “the extension of the animate accusative rule to feminine animate plurals” could be a possible motivation for the reanalysis of the rule. As a result, the syntactically driven case marking mechanism also begins to include morphological conditions for operation. He defined this as the “rule of nominative syncretism” (Timberlake 1974: 113), which is still used in modern North Russian dialects. Consequently, the nominative object rule was extended to further syntactic environment and not syntactically and rigidly restricted anymore. Timberlake (1974:118–121) classifies this as a “simplification change” (cf. Andersen 1973). The diachronic language change in the use of the NOCs in the history of Russian is reconstructed by him in the following way (table 2) (Timberlake 1974: 112–122):

**Table 2** Timberlake’s reconstruction of the changes in the application of the nominative object rule in the history of Russian

Period	Application
Old Russian Period	Nominative Object Rule
-----	motivated regular syntactic rule => since 1282 this rule was extended also to gerunds, and the Nominative Object Rule became a productive rule of the grammar at this time period
Middle Russian period (from the end of the 16 <sup>th</sup> c. to the present)	<b>the change in the application of the rule:</b> the syntactically motivated rule changed to a morphologically motivated rule
-----	
Modern use in the northern Russian dialects	unmotivated usage of the nominative object
-----	“never had the rule”

### 3.2.4. Critic on Timberlake’s Impersonal Theory

As was shown in recent studies, despite the empirical facts, the validity of the Timberlake’s interpretation of the origin and development process for the NPICs in the history of Russian must be seriously doubted. In the following I will explain the most important points of criticism on the Timberlake's impersonal theory and will also test some of those aspects within empirical corpus data.

Timberlake propose for Old Russian NOC a syntactically regulated case assignment of the patient's argument of the infinitive and declare it nominative as an original syntactic object. In the context of this theory, it will argue for an interpretation of the origin of the NOC in Old

Russian as a language contact phenomenon, which took place as a transfer from Baltic Finnish into Russian.

According to this it should be also assumed that nominatives were in a complementary distribution with the accusative  $(A \rightarrow \neg B) \wedge (\neg A \rightarrow B)$ <sup>27</sup> depending on the syntactic environment and should have the same restrictions.

First, it is to be doubted whether it is valid to propose a straightforward syntactically motivated nominative object rule for a time span of such length and second as it was shown by Dunn (1978) the NPiCs and APiCs coexist in the same syntactic contexts already in Old Russian texts, for example in the *Smolensk Treaty* (1299) and in *Russkaja Pravda* (13<sup>th</sup> c. in its early copies).

However, often this use in traditional previous works was explained as unmotivated use of the nominative in the early Old Russian period (cf. Černych 1953). The furthermore detailed analysis of the distribution of both types of construction is presented in the empirical part of this study (see Chapter 5) and showed that the use of NPiCs and APiCs may not always be interpreted as a fully interchangeable variant.

Second, also eight criteria by of the nominative patient argument for the objecthood suggested are not conclusive enough to manifest the object status of the nominative noun in this nominative with infinitive construction in Old Russian, and also its contact-induced origin seems dubious since there are structural and behavioral differences in the use and restrictions of the nominative patient argument in Russian and Baltic languages in nearly parallel syntactic environments. The eight criteria were already discussed above and some of them will be discussed here.

So, as one of the objecthood criteria Timberlake suggested is the **“lack of a personal grammatical subject” (2 in the table above)**, is not working, for example for Finnic, where the imperative takes an infinitive complement with a possessive suffix, which makes the infinitive agree in person and number with its subject and makes it personal, but the direct object of the infinitive is still in nominative (Jakab 2003:69). And, the **reccursiveness** (3 in the table) of this rule which could be extended for this kind of environment seems not working for the Finnic. Jakab (2003), for example, shows that in Finnic the property of recursiveness does

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<sup>27</sup> **Notationsregeln:**  $\wedge$  = Konjunktion: “und”;  $\rightarrow$  = Konditional: “wenn dann”;  $\neg$  = Negation: “nicht”

not apply either, because the nominative case can be assigned to the doubly embedded personal infinitive *ostaa* ‘buy’, which has second person singular possessive suffix. According to Timberlake, it would thus require an accusative object, but in Finnic is still nominative. See following example mentioned by Jakab (2003: 68) from Finnic:

(55) *Sinn taeyty-y matkusta-a Suome-en osta-a-kse-si auto*  
 you-GEN must-3.SG travel-INF Finland-illat buy-INFPOSS.2SG car

‘You have to travel to Finland to buy a car’

Also the argument that only nominative occur in Old Russian **with gerund (4 in the table)** and that it could be characterized as a common feature of Old Russian and Finnic (Larin 1963; Timberlake 1974) to be considered as a weak argument in later typological accounts, because of differences in the distribution in Baltic and in Russian (for more details cf. Ambrazas 2001) and also since Dunn demonstrates in his study (1978) that constructions with gerund + accusative are attested in Russian even earlier than those with a nominative.

Another assumption made by Timberlake’s (1974: 166 - 174) that the use of nominative with imperative and finite verbs should be interpret as a secondary phenomenon and can also be interpreted as further reanalysis of the syntactic nominative object rule. This process of nominative rule reanalysis, according to Timberlake, can be dated in the 17<sup>th</sup> century. Timberlake (1974: 70) explains that the use of non-canonical nominative object marking is not the realization of the nominative object rule, but rather “simply an instance of the personal construction with verbs of perception.” However, according to Dunn (1978: 116), cases with imperative and finite verbs are documented even in the oldest sources, and the syntactic limitation of nominative object marking in Russian had no absolute, “rigid” character in the Old Russian period as suggested by Timberlake. Therefore, use of nominative marking in the object position marked was possibly restricted to certain syntactic environments and had several different constructional patterns of realisation. In chapter 4 and 5 of this study, I will present a more detailed analysis of their distribution and their evolutionary process in the history of Russian.

Another relevant aspect of the nominative object rule is its **animacy constraint (5 in the table)**. Following this assumption, the category of animacy developed earlier than the nominative

object rule, so that it could be applied to specific nouns, and the nominative case should not be possible in masculine nouns of the *-a* type (which are always animate). In his study he explains this by restriction of the application of the nominative object rule, which could be applied to all nominal except masculine animates and pronouns (Timberlake 1974: 71). He explained the reason of this restriction as the fact that “in general animates act as agents and inanimates as patients in events”. This means that animates are marked when used as objects, to the extent that “it is necessary to specify them as accusative in Old Russian even in systematically impersonal environments; their markedness as objects overrides the fact that the environment is systematically impersonal. However, this explanation does not answer the question why it is necessary to specify an object by means of the accusative in an environment where the logical subject appears in dative and not in the nominative case. Moreover Timberlake’s hypothesis cannot also explain why masculine animate nouns of the *-a* type (plus *brat’ja* ‘brother’) do occur in the accusative and why feminine animate nouns of the *-a* type do not behave in the same way (cf. Dunn 1978:138). In a detailed analysis of the development of the category of animacy and the category of object hood in Russian, Kryś’ko (2006) illustrates that 1) the direct object function marked by the accusative evolved from the “circumstantial-attributive”, and 2) the formation of category of animacy could not be dated earlier than the 14<sup>th</sup> century in Russian. The use of the NOC construction, however, is attested earlier (cf. above).

Finally, the property of “**reflexivation**” (8 in the table), which Timberlake uses as an argument in favor of the object status of the nominative, does not apply to the Old Russian period (as already discussed in Kryś’ko 2006), because in Old Russian, the use of reflexive markers like *svoj* was ambiguous and they could be used with objects and subjects.

In recent studies on the phenomenon of non-canonical object marking in the history of Russian and in Baltic languages, both the traditional view and Timberlake’s theory have been supported. Ambrazas (2001) argues that the traditional interpretation of the development and origin of the NP<sub>i</sub>C in Russian as well as and that of Timberlake can be “regarded as complementary” (2001: 408): Timberlake’s theory applies to the later stages only, after the infinitive verb had been “separated from the paradigm of verbal nouns and become a constituent of the impersonal construction” (Ambrazas 2001: 405). The frequent use and preservation of the NOC construction in the later periods and in certain modern Russian dialects could then be explained as a contamination of different constructions due to the contact with Baltic languages, which also resulted in the preservation and reanalysis of the construction.

### 3.2.5. Dunn's (1978) theory

An alternative interpretation was proposed by Dunn (1978). It was published four years after Timberlake (1974), which, however, had not been broadly received so far. Although Dunn adopted the main ideas of Timberlake (1974) regarding original object status of the nominative in the NOC construction, at points of his work, he did not agree with the strictly rule-driven explanations by Timberlake. In contrast to Timberlake's broader typological study, he exclusively focuses on the development and use of the NOC construction in the history of Russian. For the first time, he based his description on an extensive, qualitative and quantitative empirical analysis of a corpus consisting of about 35 old and middle Russian texts, covering the period from the 12<sup>th</sup> century to the beginning of the 18<sup>th</sup> century. The main aim of his study was to find an explanation for the origin of the NOC construction, its use and restrictions, but also the circumstances of its appearance and disappearance from written Russian. For that purpose, he compared the use of the NOC construction and the AOC construction in different sources dating from the Old and Middle Russian period and paid special attention to the distribution of such infinitive constructions in different periods and texts. He reached several important conclusions regarding the use and behavioral properties of two constructional variants in different time periods and showed that the use of the NOC construction and its distribution does not support the view of the existence of a systematic nominative object rule as proposed by Timberlake.

In Dunn's (1978) explanation, the use of the nominative object remained a tendency rather than becoming a rule in the Old Russian and Middle Russian period until the accusative was used considerably more frequently in the early 18<sup>th</sup> century and finally completely replaced the nominative in written sources, except in certain dialects (cf. Dunn 1978: 142). He concluded that "Timberlake's book has not changed the state of affairs" (1978: 54). Dunn also noted that the Timberlake's exploration of the formal conditions for the distribution of NPICs had initially withdrawn the attention from the interaction of the coding properties and the nature of the relationship between different construction types and their alternate variants. According to Dunn, there is no historical evidence in support of Timberlake's assumption that the co-occurrence of a nominative with a gerund in the earliest texts is an argument for its object status, because the accusative also can occur in the same environments. Dunn also criticizes that Timberlake does not account for the parallel use of NPICs and APICs at all, and that merely assessing a use of the AOC construction instead of a NOC construction as "mistaken",



“unmotivated” or “simply stylistically” motivated lacks explanatory power regarding the emergence of the NOC construction. The basic contribution of Dunn (1978) consists in observing a *tendency in the use of the NPiCs as well as the APiCs* in Russian resulting from different linguistic and non-linguistic factors. He proposes that the APiC was the original construction and the NPiC is a “later development”. Regarding the origin of the NPiC, he considers the language contact hypothesis proposed by Timberlake as well. However, he rather explains both origin and case variation in object marking in these constructions as resulting from the interaction of several factors including a contamination of various co-existing constructions in Old Russian with dative + infinitive or dative + nominative and NPiCs. After attempting to explain the trends in the use of the construction, he concludes that, unfortunately, “attempts to draw a distinction between the two cases based on morphological or lexical factors are generally unsuccessful” (Dunn 1978: IV).

To summarize, the following table (3) gives an overview of the key points and proposals in different theories that were discussed above:

**Table 3** An overview of theoretical proposals in different theories

Theoretical works	Status of nominative NP		Origin		Restrictions			
	subject	object	Indo-European	contact induced (Finnic and Baltic)	morphological	syntactic	stylistic	geographical
Potebnja (1874), Popov (1881)	+		+		+	+	+	-
Šachmatov (1903)	+		+		+	+	+/-	+
Borkovskij (1949)	+		-		+	+	+	+
Stepanov (1984)	+		+		+	+	?	-

Krys'ko (1994)	+		+		–	+	–	–
Timberlake (1974)		+		+	+/-	+	+	+
Dunn (1978)		+		+	–	+	–	–
Mendoza (2008)		+		+	+	+	?	+
Ambrasas (2001), Holvoet (2003)	+		+		?	+	?	?
Jung (2010)	+		+		+	+	?	+

The present book mainly deals with issues of the development and the mechanisms of case licensing as well as the syntactic functions of the arguments in NOCs in the history of Russian. It is not amongst the main goals to tackle the question of origin more deeply. At the same time, it is necessary to first clarify the question of the origin of the construction to determine a point of departure for further investigation. For the purposes of my study, I adopt the traditional hypothesis of the Indo-European origin and the initial subject status of the nominative. Several arguments corroborate this interpretation, i.e. the parallel development of dative constructions and the “purposive dative” developing into the infinitive during a process of grammaticalization (Haspelmath 1989), as well as the existence of mono-clausal and bi-clausal sentences already in the Rigveda. Empirical data from diachronic and typological studies on the phenomenon of non-canonical case marking also substantiate this hypothesis.

In a typological study, Ambrasas (1987) argues against the contact-induced origin of the NOC proposed by Timberlake (1974). He demonstrates that this assumption is neither supported by empirical evidence nor by the reconstruction of diachronic evolution in the Baltic and Finnic languages. Instead he claimed that the use of the nominative object in east Finnic supported the preservation of the construction in Old Russian, even though it cannot be seen as the origin of the NPICs in Russian. Instead, the development of equivalent constructions in Baltic shows that in Old Lithuanian, the nominative argument had a subject function and a “patient of state” in the dative.

However, the analyses dealt with above mainly focused on describing the construction and did not go into the mechanisms of case-licensing much, nor did they describe the developmental

stages from a nominative subject to a nominative object more than vaguely. Therefore, the present study concentrates on these issues.

### 3.3. Possible conditions and constraints for the nominative object construction

#### 3.3.1. Morphological restrictions

In most studies on the phenomenon of the nominative object in the history of Russian assume that its use was limited by the syntactic environment within the construction, as well as by morphological properties of the nominal phrase. Most scholars (e.g. Lavrovskij 1852; Unbegaun 1935; Sprinčak 1941; Staniševa 1966; Filin 1972)<sup>28</sup> expect a non-canonical nominative marking to occur exclusively with *a/-ja*-stems in the singular of, as in (56), and with feminine nouns ending with *-i*, as in (57), in which the nominative case of the feminine noun *dan* ‘impost’ is marked by the qualifier *svoja* ‘your’.

(56) Dog. gr. 1496, Rjazan'

<i>a</i>	<i>otčina</i>	<i>mi</i>	<i>tvoa</i>	<i>deržati</i>	<i>podъ</i>	<i>toboju</i>
and	land- NOM.F.SG	I-DAT	your- NOM.F.SG	to-keep - INF	under	you - INS

‘And it is for me to keep your land’

(57) GVNP, N 10, 14<sup>th</sup>:

<i>prodajati</i>	<i>ti</i>	<i>dan</i>	<i>svoja</i>	<i>Novgorodcju</i>
to-give- INF	you-DAT	impost - NOM.F.SG	your- NOM.F.SG	Novgorodets - DAT

‘It is necessary to give your impost<sup>29</sup> to Novgorodets’

<sup>28</sup> Timberlake (1974) defines the set of nominals that can appear in a nominative object construction as those that are not grammatically animate (cf. chapter 3 for a detailed discussion of this suggestion).

<sup>29</sup> A type of tax for imported goods.

However, taking closer look at the Russian declension system, the hypothesis turns out to be untenable. In most declension paradigms in Old Russian and also in contemporary Russian, the accusative is not distinct from the nominative in the singular, with the exception of the Novgorod dialect that – unlike the rest of the Slavic languages – differentiates the nominative singular of both the nominal and the pronominal masculine *o*-stems, which originally ended in *-e*, contrasting strikingly with the ending *-ъ* (or its later reflex: zero). The *o*-stem accusative singular always takes *ъ*, as do both the nominative and the accusative of the *u*-stems. In the *jo*-stems, however, in both the nominative and the accusative singular consistently use ‘as in all other Slavic dialects (for more examples see Zaliznjak (1987: 129–134) and Zaliznjak (2004: Part: Morphology)). Most nouns in modern Russian belong to different declension in compare to historical classes that over time underwent changes in the forms of their paradigms. In contemporary Russian, nouns express two numbers, singular and plural, and six basic cases, nominative, genitive, dative, accusative, instrumental, and locative. However, all these cases are not marked in the same way. Timberlake (2004: 130) notes that in Russian one can distinguish two kinds of gender, one being morphological and the other syntactic, which closely correspond with each other. In Old Russian, there were three numbers, singular, plural and dual (Rus.: *dvojtvennoe*), and the noun in Old Russian inflected for seven cases: nominative, accusative, genitive, locative, dative, instrumental, and vocative, and in six declension paradigms. In the singular, nouns are more clearly distinguished than in the plural. In the 15<sup>th</sup> century, probably the old nominative ending *-i* was replaced by the accusative ending *-y* in the plural, the unification of the nominative and accusative cases having proceeded even earlier. The syncretism of the nominative and the accusative forms started to evolve especially in the animate nominals (with the development of the category of animacy in Russian) due to the replacement of the “old accusative”, which was originally identical to the nominative form, with the genitive<sup>30</sup>. Only in the forms ending with *-a* was the old accusative form preserved for a longer period. In Old Russian in compare to contemporary Russian, the nominative and accusative cases were distinguished not only in nouns ending with *-a/-ja* in feminine or masculine (different forms in the two cases: *-a/-ja* in the nominative versus *-u/-ju* in the accusative), but also in the plural paradigms of the masculine *-o* and *-jo* types (*-i* in the nominative like *stoli* and *-y* in the accusative like *stoly*) as well as in the masculine *i*-type and the masculine consonant type nouns. However, the process of merging of both cases set in at

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<sup>30</sup> The so-called accusative-genitive see below.

the beginning of the 13<sup>th</sup> c. already and there are only a few clear examples where the noun in the masculine plural appears in the nominative case, as the word *razbojnici* ‘criminals’ in (58):

(58) RLA, p. 451, 13<sup>th</sup> c.

<i>Aže</i>	<i>oub'jut'</i>	<i>posla</i>	<i>ili</i>	<i>popa,</i>	<i>to</i>	<i>dvoe</i>	<i>togo</i>	<i>dati</i>	<i>za</i>	<i>golovu,</i>
If	kill	envoy	or	priest,	than	two	to	give-INF	for	
					them			head,		

<i>Aže</i>	<i>ne</i>	<i>boudet</i>	<i>razbojnikovъ</i>	<i>boudout'</i>	<i>razbojnici</i>
if	not	be - 2.SG	criminal	be - 3.PL	criminal- NOM.M.PL

*vydajte*

give - IMP

‘If somebody kills an envoy or a pope, it is necessary to give two persons for one life.  
If [the person killed] is a criminal, it is necessary to give two criminals’

Also, because the texts from the earliest period (before the 13<sup>th</sup> c.) do not provide completely reliable evidence for the use of the masculine plural nouns of the *o*- and *jo*- type or *i*-type, it is difficult to say how regularly the masculine nouns in plural with nominative or accusative case were used.

However, in Old and Middle Russian texts, there is a great number of examples of PiCs as well as SeCs with masculine and neuter nouns in which it is not possible to distinguish between the nominative or accusative, as in the following examples the masculine noun *obrokъ* ‘Übersetzung’ in (59) and the neuter *sudnoe delo* ‘forensic case’ in (60):

(59) PSG, 14<sup>th</sup> c.:

<i>A</i>	<i>koli</i>	<i>dan'</i>	<i>dati</i>	<i>въ</i>	<i>Tatary,</i>	<i>togdy</i>
and	if	toll - NOM.F.SG	to-give-INF	to	Tatars	then
<i>i</i>	<i>obrokъ</i>	<i>dati</i>	<i>cerkovnymъ</i>	<i>ljudemъ</i>		

also                                      corvee-    to-give - INF    church -DAT    people-DAT  
 NOM/ACC.M.SG

‘And if it is necessary to give the toll to the Tatars, then for the church people it is necessary to pay the curve’

(60) PSG, 14<sup>th</sup> c.:

<i>velitb</i>	<i>sudnoe</i>	<i>delo</i>	<i>pod'jačemu</i>	<i>napisati</i>	
order	forensic-	case-	clerk-DAT	to-write	-
	NOM/ACC.N.SG	NOM/ACC.N.SG		INF	

‘One should give order to a clerk that is necessary to write the forensic case’

Therefore, the occurrence of masculine and neuter nouns in NOCs cannot be excluded, but this is difficult to prove, since the endings for the masculine and the neuter do not differ from each other in Old and Middle Russian. Unfortunately, we lack data with masculine gender, because already from the 13<sup>th</sup> century onwards both the nominative and the accusative masculine nouns could be mixed. On the other hand, Novgorod dialect data add important evidence for non-canonical object marking and show that it not only pertained to feminine nouns of the *-a*- and *-i* types.

In the Old Russian period, three dialectal zones are distinguished: The South Russian dialects, the Middle Russian dialects, and the North Russian dialects. This division does not correspond to the division of modern Russian dialects in West, South and North. The North Russian dialects deviate significantly from Standard Russian in their morphology and syntax (cf. Kuz'mina 1993). Dialectal maps of the Old Russian period (Kuz'mina & Nemčenko (1964: 153)) distinguish a northern dialectal zone with the centers Novgorod and Pskov from a southern dialectal zone, with the centers Suzdal' and Rostov, and Middle dialectal zone. The southern dialectal zone gradually extending to some areas of central Russian (Moscow), as well as to Ukraine and to parts of Belarus at these times.

Two features are characteristic for the North Russian dialects: A) the use of non-canonical nominative object marking, and B), as mentioned above, the fact that in the Old Novgorod dialect the nominative (ending *-e*) singular of nouns and pronouns in the masculine *o*-stem was

originally distinct from the accusative (ending *-ъ* or zero).<sup>31</sup> During the Old Russian period, morphosyntactic features such as the NOCs (A) were common in the northern dialects only. Kiparsky (1960: 385) did not find evidence for the construction in the remaining Slavonic languages, including Old Church Slavonic<sup>32</sup>. In the later periods, however, due to the extension of the power and control of Novgorod, the Old Novgorod dialect, or at least some of its features, spread to the northern Urals, to the regions near the White Sea and to the Kola Peninsula. In modern Russian, some of the declension paradigms of nouns were adopted from the south and others from the north. This was also the reason for fluctuation and variation in the usage of one or the other form.

The declension of nouns in the early Old Novgorod dialect is summarized in the table (4) below (based on Zaliznjak 2004: 96):

**Table 4** Historical declension of nouns in the early Old Novgorod dialect

I.a. The <i>a</i> -stem paradigm with hard and soft stem				
	SG hard	PL	SG soft	PL soft
NOM	<i>grivna</i>	<i>grivny</i>	<i>zemlja</i>	<i>zemlě</i>
ACC	<i>grivnu</i>	<i>grivny</i>	<i>zemlju</i>	<i>zemlě</i>
Ib. The <i>a</i> -stem paradigm for nouns with <i>i</i> -ending				
	SG	PL		
NOM	<i>gospodynĭ</i>	<i>gospodyny-/ě</i>		
ACC	<i>gospodynju</i>	<i>gospodyny-/ě</i>		
II. The <i>o</i> -stem paradigm				
	SG, M	PL, N	PL, N	

<sup>31</sup>The use of the ending *-e* changed with time as did the distribution of old and new forms in different text types. Pereltsvaig (2015) calculated that the distribution of the original ending and other “calqued-endings” by a 97/3 ratio also occurs in specific religious, translated contexts, due to the influence of Old Church Slavonic or southern Old Russian. In the later period, this situation changed: The distribution ratio in the 15<sup>th</sup> century only was 50/50.

<sup>32</sup> Kiparsky (1960: 335) cites a single late example from an Old Church Slavonic text (Codex Suprasliensis).

NOM	<i>chlebe</i>	<i>město</i>	<i>města</i>	
ACC	<i>chle<b>ѣ</b></i>	= <i>NOM</i>	<i>města</i>	
III. The <i>u</i> -stem paradigm				
	SG	PL		
NOM	<i>dar<b>ѣ</b></i>	<i>dary</i>		
ACC	= <i>NOM</i>	= <i>NOM</i>		
IV. The <i>i</i> -stem paradigm (masculine, feminine)				
	SG, M	SG, F	PL, M	PL, F
NOM	<i>put'</i>	<i>drob'</i>	<i>put'e</i>	<i>drobi</i>
ACC	= <i>NOM</i>	= <i>NOM</i>	<i>puti</i>	= <i>NOM</i>

In Old Novgorodian examples, only two alternative ways of marking the nominative singular existed: *-e* or *-ѣ*. In the early Old Russian period, 90 % of all the documented cases had *-e* as the masculine nominative singular ending, whereas in the later period from the end of the 14<sup>th</sup> to the beginning of the 15<sup>th</sup> century, these amounted only to 63 % (Zaliznjak 2004).

Due to this peculiarity of the Novgorodian dialect unambiguous cases of a masculine noun in the nominative are attested. Rare cases such as (61) have been cited repeatedly (Dunn 1978; Zaliznjak 1987: 12; Krys'ko 1994; Timberlake 2015).

(61) Berg.gr. N 93, 1460:

*A            osetre                            imѣ                    imati                    po starine*  
and                    sturgeon   -   they - DAT      to-take - INF    according to custom  
NOM.M.SG

‘and they should take the sturgeon according to custom’.



### 3.3.2. The category of animacy

Another feature that is widely recognized as decisive for NOCs is the category of animacy, its parallel rise, establishment and development of the case marking strategies.

There is no doubt that the development of the constructions was closely related to the rise of the category of animacy in the history of Russian (see also Timberlake 1974, Krys'ko 2006). This process begins in the 12<sup>th</sup> century, or even earlier, with masculine *-o* type nouns as well as many pronouns. This leads to the creation of further classes of nouns in which the accusative is distinguished from the nominative. In the process, the original accusative of the various types of nouns in question, after having merged with the nominative form over time, was replaced by a form identical to the genitive (the so-called genitive–accusative). The present stage – the opposition of nominative–accusative (inanimate) forms and genitive–accusative (animate) forms – appears to have been reached in the 17<sup>th</sup> century.

The use of the NOCs both with Russian and especially in the modern Russian dialects, has been subjected to several important changes, to the effect that they these constructions were no longer restricted to systematically impersonal contexts, but appear just as often as the object of a finite verb. This has been explained as a result of the ‘complexification and specification’ of the accusative case (Popov 1880; Krys'ko 1997). It was shown (e.g. Popov 1879; Dunn 1978; Krys'ko 2006) that in the history of Russian, the restrictions and the evolutionary process of the NOCs, as well as their case variation, are closely connected to the development of transitivity and the sub-specification of accusative case marking for the (direct) object. At the same time, the notion of transitivity is closely connected to the formation of the passive as a voice category.

In the later periods (after the 14<sup>th</sup> c.), the lexico-grammatical division of verbs into transitive (a precondition for the presence of an accusative) and intransitive was one of the important stages in the process of the formation of a direct object accusative (for details cf. Krys'ko 2006:45-48). There is still discussion, if the semantic-pragmatic properties of non-personal animated nouns affected the accusative marking of nouns. According to Krys'ko (2006), the use of the different forms of a direct object did not depend on some special semantic quality of animacy in the nouns, because there was no difference in their use if the nouns designated humans or non-humans, i.e. animals. Only in some contexts was the choice of a form influenced by the expression of definiteness (of a known object) or indefiniteness (of an unknown object

mentioned before). Therefore, if the formation of a passive as a voice category was also closely correlated with the categories of transitivity and object marking, both processes are the result of a long process of grammaticalization. Originally, they did not depend on any form of the verb (reflexive / ergative) nor on the verb semantics (objective / non-objective), nor on any syntactic properties of the verb (transitive / intransitive). In Old Russian, many verbs combined with more than one case form in one and the same argument slot or were even open to distinctly different syntactic structures.

Instead, all changes in the use of the passive constructions were closely connected with the accusative gradually taking on the semantics of a direct object. At the end of this development, the passive transformation can be considered as a very important feature, but it cannot serve as an exclusion criterion for determining the object status of an argument, because not all verbs that could be passivized in Old Russian have maintained this property in modern Russian. Likewise, it cannot provide a universal criterion for direct object marking and transitivity (Krys'ko 2006: 426-428).

Against the background of the formation of the category of animacy and “object” in the Russian language, as explained by Krys'ko, and bearing in mind that the original accusative strongly associates itself with a nominative in being an independent case, the development of the category of animacy in connection with case variation in object marking can now be taken into account (for various explanations of the case variation in NOCs cf. chapter 3 in detail).

The case variation and the development of the category of animacy in the history of Russian have been extensively discussed in several works of Popov (1879-1881) and Krys'ko (1994, 1997, and 2006). The development of direct object marking with an accusative was explained by the idea (suggested first by Popov 1879-1881) that the case marking strategy for the (direct and indirect) objects developed from the original “independent cases”. The accusative (and, originally, also the nominative) was an independent case (at a time when nouns and verbs were not yet distinguished) and characterised by its polyfunctionality varying between nominal and verbal categories. Therefore, it had a so-called “circumstantial-attributive” meaning. Historically, the accusative object marking derived from independent accusatives occurring originally with both verbal and nominal forms. Only later did the independent accusatives become gradually determined by a presence of certain (active) verbs. Consequently, they began to encode direct objects. On the basis of empirical evidence from texts of the 11<sup>th</sup> to the 14<sup>th</sup> centuries, Krys'ko found a complex (diffuse) use of the accusative case, which was significantly

different from its use in the modern Russian language, and in Ukrainian and Belarusian, but is more like that in other ancient Indo-European languages (Krys'ko 1997: 48-109). So, the case variation between the accusative and the nominative (or also, between the accusative and genitive), can rather be better explained with a more extensive system of archaic circumstantial-attributive meanings inherited from the Indo-European accusative as a general oblique case. The circumstantial-attributive functions of the accusative and the manifestation of accusative object marking in the Middle Russian period was related to a specification of the accusative case" (see more in Popov 1880: 250) and the rise of the prepositional-case forms. So, because of the diffuse function of case marking, many verbs could be combined with different cases likewise, i.e. with genitive and likewise with the accusative, which was a characteristic feature of the verbal valence of that period. In the Old and early Middle Russian period, the compatibility of different verbal forms with the accusative=genitive or with the accusative=nominative does not display strict regularity (Krys'ko 2006). Krys'ko lists numerous verbs that do not show the compatibility with a genitive that one would "expect" on the basis of linguistic facts, but instead exhibit a frequent compatibility with the accusative case, i.e. the accusative=genitive. With the noun *byka* 'bull', he lists the verb forms *voskresiti* 'to raise up', 'to resurrect', *pohvatiti* 'to catch', *privesti* 'to bring', *pustiti* 'to let it go', *razdraždiiti* 'to miff', *ubiti* 'to kill', *umoriti* 'to starve to death'. With the noun *konja* 'horse', he lists the verb forms *voditi* 'to ride', *vopryachi* 'to shut in, to harness', *imeti* 'to have', *moneti* 'to think', *navesti* 'to lead', *naritsati* 'to name, to call', *otjati* 'to take away', *povorotiti* 'to turn', *pognati* 'to run', *poznati* 'to recognize', *pokazati* 'to show', *sovratiti* 'to turn', *uvorotiti* 'to return', *ukrašati* 'to decorate', *uljubiti* 'to love'. In his view, this proves "the irrelevance of the morphological features of a verb under control by a noun" (Krys'ko 2006: 68). Also, the interrelationship between the type of a verb and the choice of a particular variant, seems to be irrelevant, because "the predominance of perfectives [i.e. in combination with an accusative = genitive, U.Y.] is achieved through a variety of prefixed derivatives that make up the largest group of the verbal lexicon" (Krys'ko 2006: 67). Krys'ko (2006: 175 - 239) illustrated case variation in object marking between the accusative vs. genitive with different verbs independent from their semantics or their aspect. So, for example, the examples of different verb forms occurring in combination with an accusative = genitive that Krys'ko lists are: *bereči* 'to protect', *bljusti* 'to follow, to be'; *běžati* 'to run', *viděti* 'to see', *věděti* 'to know', *glagolati* 'to say', *dobitisja* 'to get, to obtain', *doždati* 'to wait'; *doiti* 'to reach', *dosmatrivati* 'to watch', *dostati* 'to reach, to get', *ždati* 'to wait', *zrěti* 'to see', *iměti* 'to have', *iskati* 'to search', *loviti* 'to catch', *ljubiti* 'to love', *napolniti* 'to fill', *slušati* 'to listen', *sozdati* 'to create', *stoiiti* 'to cost', *tvoriti*

‘to create’, etc. Also, regarding a possible interrelationship between the imperfective or perfective aspect of the verb, Krys’ko noted the irrelevance of this fact. Because the predominance of verbs of perfective aspect in combination with accusative = genitive is associated just with their overall frequency (“the predominance of perfectives is achieved through a variety of prefixal derivatives that make up the largest group of verbal lexicons” in the Old Russian period) (Krys’ko 2006: 67). Further on, he cites the examples where imperfective verbs occur in combination with accusative = genitive: *proganjati* ‘to send away’, *esti* ‘to eat’, *obretati* ‘to find’, *slediti* ‘to follow’, *ukrašati* ‘to decorate’, *naritsati* ‘to name’, ‘to call’, *voditi* ‘to ride’, ‘to drive’, *držati* ‘to keep’, *huliti* ‘abuse’, ‘scold’. The perfective forms of verbs like: *pustiti* ‘to let’, *umoriti* ‘to starve to death’, *ubiti* ‘to kill’, *privesti* ‘to bring’, ‘to lead’, *prokljati* ‘to curse’, *obresti* ‘to find’, ‘to have’, *nareči* ‘to name’, *uvorotiti* ‘to return’, *svoboditi* ‘to free’ etc. In the Novgorod dialect of the 14<sup>th</sup>-15<sup>th</sup> centuries, a variation of both forms in accusative, i.e. accusative = nominative in personal nouns and accusative = genitive in the names of animals is “repeatedly observed” (Krys’ko 2006: 230).

The non-canonical object marking by a nominative in the Old and Middle Russian has already been investigated under different approaches and in combination with several adjacent phenomena and developments.

The most scholars have generally agreed that those animate nouns which develop the genitive-accusative are not affected by the NOCs. Therefore, the distribution of nominative-accusative opposition and on the other hand the accusative-genitive presents certain difficulties and both developments represent contradictory tendencies, if we look at the nominative object rule as a one rule. As it was noted in the NOCs Non-canonical object marking presumably occurred only with inanimate nouns while animate nouns were only used in the genitive-accusative form (among others, cf. Timberlake 1974). However, this was not always the case. And also, the parallel rise of the category of animacy in Russian had an impact on the use of the nominative vs. accusative marking in NOCs. In the Old Russian period, it had an optional character (with exceptions and variations in the choice of cases), which lead to fluctuations in case marking of animate nouns, such as *čeljadin* ‘slave’ in nominative (62) and *čeljadina* ‘slave’ in genitive in (63) both examples from Russkaja Pravda (RP, Sinod.sp):

(62) RP, Sinod. Sp.:

<i>svoi</i>	<i>čelėdinъ</i>		<i>pojēti</i>
yours	slave	-	NOM- to-take - INF.
	ACC.M.SG		

‘It is necessary to take your own slave [with you]’

(63)	<i>to</i>	<i>opēt’</i>	<i>vorotit’</i>	<i>čelėdina</i>
	then	again	to-return - INF.	slave - ACC-GEN.M.SG

‘It is necessary then to give again the slave back’

The variation in case marking strategies could possibly be explained by diverging phenomena influencing case choice: the category of animacy affected only specific classes of nouns and pronouns according to their morphological properties, whereas nominative object marking was influenced by the syntactic environment of the noun.

It is not yet clear, however, how exactly these contingent processes could have determined the use and choice of the two constructional variants, i.e. with alternating cases, and which force exactly instigated the case variation? I will suggest looking at this type of case variation as a variation of two competing rules (nominative object rule and differentiate object marking) and not just one. And therefore, in next chapter I will introduce some main ideas of the Competing Grammar approach.

### 3.3.3. Dialectal use of the NOCs

In the previous studies was demonstrated that the distribution of nominative vs. AOCs was not the same even in texts written in the same dialectal area or period (see more in chapter 2.2). In some texts, the nominative construction was preferred over the accusative construction, (e.g., in the treaty from 1229 between Riga and Smolensk, in the charters of Great Novgorod and Pskov in the Laurentian chronicle) , whereas others (e.g., in the Novgorodian chronicle, the Law of the Rus’ in its copies from the 13<sup>th</sup> c. (cf. Dunn 1978: 87–99), the birch bark documents (Ber.gr) and in questions of Kirik (VK)) the accusative object marking predominated (for more examples see Zaliznjak 2004, part 4 (Syntax)); Ron’ko & Zimmerling 2015). In search for an explanation of this case variation in object marking (cf. for example Dunn 1978; Babby 1994,

In contrast, Zaliznjak (2004) demonstrated that the use of two variants (nominative vs. accusative) must have followed a syntactic rule already established in the Old Russian period (Rus.: *ustojčivye pravila upotreblenija*) based on examples from the text of VK. In his opinion, the distribution of the two variants was motivated syntactically since later corrections by scribes did not influence the use of the two variants. The nominative was used in infinitival constructions with an independent infinitive, as in (64) below, and in an infinitive clause with *dostoit* ‘it is fit’ as in (65), whereas the accusative was used with dependent infinitives in modal constructions, for example with *velěti* ‘to order’ as in (66).

(65)	<i>dostoit'</i>	<i>li</i>	<i>rězati</i>	<i>vъ</i>	<i>skotъ...</i>	<i>ili</i>	<i>ptica</i>
				<i>nedělju</i>			
	fitting- 3.SG	COND	to-slaughter - INF	in week	cattle...	or	bird - NOM.F.SG

94

‘Is it required to slaughter cattle during the week...or bird’

- (66) *aže*      *velit’*   *bljusti*      *neděľju*      *i*      *soubotou*  
and      order   to-keep      - week - ACC.F.SG      and      sabbath - ACC.F.SG  
INF

‘and it is in order to watch over the working weekdays and the Sabbath’

Alternatively, Borkovskij (1944) assumed that the NOC originated in certain North dialects and expanded into other regions in Middle Russian period becoming the norm or at least a feature of chancellery language there, too. However, this explanation is inconclusive for two reasons. First, it does not explain why only that type of modal construction was adopted by the Muscovite chancellery language whereas other dialectal features (from Northern Dialects) were not. Second, both official and profane texts in modern South Russian dialects give evidence of NOC constructions, too (cf. Kotkov 1959). However, their use follows its own patterns that do not correspond to northern documents like in example (67). Additionally, South Russian dialects feature SeCs that cannot have been inherited from the chancellery language of Moscow, in which similar examples are rare. Amongst these specific constructions are SeCs with finite verbs (68) and with a modal *nado* ‘translation’ (69).

- (67) Archangel’sk:

*Pora*                      *nevesta*                      *vstrečat’*  
it is time                      bride - NOM.F.SG                      to-meet - INF  
‘it is time to meet the bride’

- (68) Penza:

*kupil*                      *izba*                      *na snos*  
buy – PRF.M.SG      house - NOM.F.SG      to-demolish - INF  
‘I have bought the house which should be demolished’

- (69) Oloneck:

<i>Vysušit'</i>	<i>nado</i>	<i>trava</i>
to-dry – INF	need - MOD	grass – NOM.F.SG.
,it is necessary left to dry grass'		

Generally, studies on the use of the NOCs in modern dialects (see, e.g., Sokolova 1957; Kotkov 1959; Staniševa 1966; Kuz'mina 1993; Dunn 1982 etc.) demonstrated that the use of the non-canonical object marking differs in the South and the Northern dialects. For example, in northern dialects in compare to southern dialects nominative object marking was preferred over the accusative by speakers in both sentences with dependent or independent infinitives (cf. Georgieva 1949; Kuz'mina & Nemčenko 1964) especially in the northern dialects. Another interesting peculiarity of Northern dialects seems to be the fact that it was distinguished between animate and inanimate nouns and the “old accusative form” for a long time (accusative = nominative instead of the accusative = genitive) was used: *ždala vnuki* ‘she waited for her grandsons (accusative)’ (Belg.obl.); *vybirali brigadiri* (accusative) ‘we selected governmans’ (Smol.ob). According to Krys'ko (1994) in southern dialects the nominative is frequently used in order to express a temporal specification: *vsja nedelja* ‘all week’, *vsja žizn' prožit' nado* ‘it is necessary to live all life’<sup>34</sup>. In the light of traditional works (see chapter 3.2.1) this fact supports the analysis of NOCs as an inherited Indo-European feature<sup>35</sup> (e.g., Potebnja 1888, 1958; Lomtev 1949; Stepanov 1984; Krys'ko 1994). The universal path of grammaticalization (from a purposive category into an infinitive, see Haspelmath 1989) must have been influenced by various language-internal micro changes (such as the rise of the category of animacy, the grammaticalization of the infinitive and the change from the existential to the modal construction) as well as external micro-changes (for a detailed discussion see Haspelmath 1989).

<sup>34</sup> The use and distribution of the NOC in modern dialects have been analyzed by, e.g., Kotkov (1974), Kuz'mina (1993). As noted by Kuz'mina (1993: 8), this type of construction was known also in Kostroma dialects, in Vologda and in the south-west part of Belarusia (Belaazyrs'k). One example was cited in Karskij (1911: 163) from vernacular Belarusian: *Sjastryca Aršul'ka, padai mne kašul'ka* ‘My sister Aršul'ka give me the porridge’, where the nominative object *kašul'ka* ‘porridge’ is combined with an imperative *padai* ‘give me’.

<sup>35</sup> There are, however, some studies that considered the status of the nominative object construction as a common Slavonic feature (e.g., Sprinčak 1941; Larin 1963; Ševcova 1964 and Kiparsky 1967) rather than a feature of Indo-European origin.



Generally, the use of the non-canonical nominative marking in SeCs (with finite verbs or imperatives) is interpreted as a secondary phenomenon resulting from the process of “*razloženiye*”, i.e. reanalysis of the original NPiCs. For instance, Šachmatov (1903), Staniševa (1966), and Filin (1969) argue that the nominative with a finite verb and in the nominative-in-list do not represent an “arbitrary use of the nominative as object” but rather result from the reanalysis of original rule. Against this background, the interpretation of the origin of the NPiCs construction as a purely regional phenomenon restricted to the northern Russian area (as suggested for example by Sprinčak 1941; Obnorskij 1946; Borkovskij 1949; Černych 1962) was rejected. Instead, the authors argued that NPiCs possibly became regionally restricted with time due to extra-linguistic factors (as already discussed in chapter 2.2). In order to support the idea of the Indo-European origin of the NPiC Krys’ko (1994: 192) refer to typologically parallel constructions found in other Indo-European languages and to evidence from old Southern Russian dialects (see, e.g., Sokolova 1957, Kotkov 1959). Filin (1969: 76–77) illustrated that NPiCs were common in Belarusian texts dating from the 13<sup>th</sup> century and that their usage declined between the 14<sup>th</sup> to the 17<sup>th</sup> century. Moreover, different typological studies on historical Baltic languages describe nearly parallel constructions with nominative patient argument (e.g., Holvoet 2003; Ambrazas 2001; Seržant 2016). Some scholars assume that the decline of NPiCs started in the South and spread into the North where NPiCs did not become a feature of standard language. Recent, empirical studies on this phenomenon and its historical distribution indicate that the apparently restricted use of the NPiCs related to the specific pragmatics of the construction itself rather than with its syntactic features or a dialectal division (cf., e.g., Krys’ko 1994).

To sum up, traditional studies offer a vast amount of material, but their explanation of the syntactic status of the nominative argument and its variation with an accusative is rather based on intuition than on empirical data where two variants and all realization forms have been compared. Furthermore, they take notice of differences between NPiCs and SeCs, but fail to specify the nature of these differences. Some of the issues have already been discussed in several recent studies, for instance by Jung (2010) and Kwon (2009) within the minimalist approach that elaborated on the key idea of Potebnja’s (1958) reconstruction (see section 3.2.3. below). Another contact induced theory on the origin and development of the NOC in Old Russian and modern dialects have been proposed by Timberlake (1974). Timberlake’s interpretation is still one of the prominent explanations of the NOC in the history of Russian and is often adapted also by other researchers (see for example Mendoza (2008), Babby (2009)

etc.), therefore in following I will briefly summarized here the most relevant ideas of this approach.

In his study Timberlake postulate syntactic “Nominative Object Rule” (see section #). In that framework, the variation and ambiguity in case marking found in Middle Russian are explained “by the desire to imitate high literary style” (Timberlake 1974: 33). And the use of the nominative already in the Old Russian period should be operated within syntactic environment, while the licensing of the accusative, in Old Russian, was based on morphological rules. In other words, whenever the environment was “systematically impersonal” (i.e., without grammatical subject), the direct object was marked with the nominative as the “default case” and stayed in the nominative; otherwise it was marked with the accusative. Noting the exception of animate nouns and pronouns which are often marked by the accusative instead of the nominative, even when the environment was systematically impersonal, Timberlake formulated the “animacy constraint”, which predicts the case licensing of the accusative instead of the nominative so that the morphological rule overrides the syntactic rule. In a later period, this rule was reanalyzed and changed from a syntactic to a morphological nominative object rule (in the sense of Timberlake 1974: 104–113). According to the Nominative object rule than the distribution of both variants (NOC vs AOC) should be complementary. The later ambiguity in the use of both cases in middle Russian texts is explained “by the desire to imitate high literary style” (Timberlake 1974: 33) rather than being merely accidental. The following facts support this interpretation: first, the NOC construction was rare in documents written in high literary style and originally restricted to the northern dialect area; second, the later use of the nominative also in SeCs is explained as a marked variant or “local”, “old-fashioned variant”. Other variables like word order and the occasional use of the accusative instead of the expected nominative are explained as stylistic variation. Because this rule (nominative object rule) does not exist in the Old Church Slavonic, some examples with an accusative occurred. However according to Ambrazas (2001) and Jakab (2003: 59), however, empirical evidence from Old Russian and East Baltic shows that this theory only applies to a later period of the development of the NOC (middle Russian period) and does not explain all instances (if we take in account also secondary nominative constructions (SeCs)) whether in Old Russian either in Baltic languages in the earlier periods. Moreover, the use of both variants was attested in the earliest Old Russian texts and was not stylistically restricted (Dunn 1978). Analyzing more than thirty Old and Middle Russian texts, Dunn (1978) concluded that the use of the NOC and AOC constructions vary regarding their relative frequencies. For instance, in the earliest copies of the

*Law of the Rus'* (RP) the AOC construction predominates compared to instances of NOC constructions, but in the later copies the situation changes. In other texts such as the Russian-Livonian Records from the 13<sup>th</sup> century (RLA) and in documents from the Novgorod area the NOC construction was used with significant predominance. Dunn (1978) concluded that the results are “inconsistent” and that it is therefore difficult to draw a clear distinction between the two constructions or explain the use of two cases based on the syntactical or morphological properties of the constructions.

### 3.3.4. Syntactic hypotheses

To date, existing studies have not systematically examined case variation in object marking in the NOCs. Several in fact irrelevant factors were suggested as determining for case choice. Probably one of the first explanations for non-canonical object marking in Old Russian and Old Icelandic was proposed by Babby (1991, 2009), i.e. the so-called “configurational strategy of case assignment” within the minimalist framework. According to this hypothesis, one can distinguish between two types of cases: *configurational case* and *inherent case*. Babby (1991) wants to demonstrate with his study that the nominative objects in Icelandic and Old Russian are unitary phenomenon and by comparing the northern dialects of Old Russian and Old Icelandic try to show the interplay of universal and language specific properties of case assignment strategies. Moreover, he explains case assignment of the direct object as a dependent on case hierarchy mechanism. Therefore, the verbal phrase does not have an autonomous case domain and therefore the whole clause is treated as a single structural case domain. In other words, case realization is a clause property. This means that the case of the objects correlates with the subject case of the verb. The choice of the N+I (nominative with infinitive) or A+I (accusative with infinitive) is therefore predicted by the presence or absence of oblique subjects (e.g., a dative). If the sentence contains a subject in an oblique case, the second argument (direct object) becomes the highest NP and is assigned the nominative. If a subject is missing, the accusative is assigned. Thus, Babby (1991) formulates the rule of non-canonical case-assignment as follows:

The assignment of a nominative or an accusative case to the direct object of transitive infinitives in the northern dialects of Old Russian depends directly on whether the infinitive heads a small-clause or a small-predicate: [<sub>inf</sub> nP<sub>iDAT</sub> Inf' <I>]. (Babby 2009)

This approach assumes that there are differences in object and subject licensing because of different syntactic structures of subject- or object-controlled infinitive complements.<sup>36</sup> Consequently, Babby (1999 and also later in 2009) concludes that the distribution of NOC and AOC constructions was complementary and that the nominative case was chosen only in infinitive s-clauses, because all independent infinitive clauses have an oblique subject, i.e. the logical dative subject; the deontic modal meaning derives from a composition of elements. According to this theory, in Old Russian, the use of the nominative or the accusative can be predicted by the absence or presence of the dative logical subject. Although this point of view was adopted by other scholars, critical accounts remarked that this explanation does not apply universally to all NOC and/or AOC constructions<sup>37</sup>. Babby's (2009) explanation also leaves unclear how the nominative "checks" the case (e.g., Jakab 2003, Zimmerling 2015) and cannot explain an accusative object in the absence of a nominative. Moreover, as already discussed in chapter 3.2.3, according to the observations by Dunn (1978) and according to my own corpus evidence for Old Russian, the nominative object and the accusative object in such infinitival constructions co-exist and, in some cases, the accusative object even appears considerably more frequently than the non-agreeing nominative object, which is also true for Finnic (see Ambrazas 2001). Hence, empirical evidence suggests that the distribution of both cases is rather a tendency than a strict rule.

Franks and Lavine & Franks (2006) expanded the approach proposed by Babby (1991). They focused on NOCs in Northern Russian and Lithuanian with respect to the question of the origin of the nominative in such constructions, putting forward the idea of a syntactic shift based on "the phase-based Syntax and the Locality of Accessibility". According to their approach, the nominative object in Old Russian and Lithuanian underwent syntactic movement (displacement<sup>38</sup>) that was neither motivated lexically, nor by the word order (OV instead of VO). It was, so to speak, "locally determined that there exists no other option but to move"

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<sup>36</sup> "Subject-controlled complements are canonically infinitive s-predicates whose unlinked external theta role I is syntactically V-bound; object-controlled complements are canonically infinitive s-clauses whose dative subject is antecedent-bound by a matrix object. Bare infinitive complements do exist, but only in composition with auxiliary verbs." (Babby 2009: 179)

<sup>37</sup> It does, e.g., not apply to the SeCs where the infinitive is dependent on the matrix verb or the nominative object in imperative sentences, where the subject is not oblique.

<sup>38</sup> In minimalist architecture, syntactic movement is always motivated by the need to match (check) the features, but Franks & Lavine (2006) suggested also another motivation for the movement, namely locality.

(Lavine & Franks 2006: 238). They proposed the following two factors as determining for objects in non-canonical nominative:

1) The head itself, which is not represented in the non-standard subject-predicate coordinating system. Thus, the nominative of the NP is an argument of the related infinitive instead of the matrix predicate<sup>39</sup>.

2) A special OV word order in both languages<sup>40</sup>.

By comparing Icelandic and Balto-Slavic constructions, they concluded that they are different in nature. They argue that object shift in Balto-Slavic is case driven and obligatory, though its effects can be obscured in Old Russian, presumably due to “word-order requirements reflecting functional sentence perspective” (Lavine & Franks 2005: 199). Therefore, in the case of the Old Russian and Lithuanian construction, “nominative objects in Old Russian and Lithuanian move to get a case; accusative is the assigned case in situ. Movement targets the outer specifier of vP, an ‘escape hatch’ of the strong vP phase, which allows the nominative object to be visible to a higher case-valuing probe” (Lavine & Franks 2005: 197).<sup>41</sup> Despite their an alternative solution for case variation in the NOC was presented by Jakab (2003). The main propose of her paper is to find an explanation for case assignment strategies and case-variation. Generally, she supported the theory of Timberlake (1974) regarding the origin of the construction However, she also noted a weakness of Timberlake’s (1974) impersonal theory, which cannot explain nominative objects in personal environment in Finnic. Her work was carried out in the framework of Asymmetry Theory (Di Sciullo 1999) and the multiple feature-checking hypothesis proposed for Japanese (Ura 1996, for more details cf. Jakab 2003: 62–64), the basic tenet of which is that the realization of morphological case is not strictly connected to the argument. In comparing examples<sup>42</sup> from Old Russian and Finnic Jakab (2003) identified similarities of Old Russian NOCs and Finnic modal constructions regarding their mono-clausal

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<sup>39</sup> “We assume that the source for the nominative marking on the objects must be a head that is not implicated in the standard subject-predicate agreement system [...] nominative NP is an argument of the embedded infinitive rather than of the matrix predicate” (Lavine & Franks 2005: 201).

<sup>40</sup> “We take the OV order to indicate the higher head, the case-licensing head cannot see into the vP of the embedded infinitival, a strong phase. Next, the object moves to the edge of vP, its EPP position, where it is visible to higher syntax. Otherwise, it would remain unvalued for case” (Lavine & Franks 2005: 201).

<sup>41</sup> Despite their generalizations of Babby (1991, 2009) and Lavine & Franks (2005), however, lack explanatory power insofar as they do not apply to all empirical data (cf. Ambrazas 2001, Jakab 2003).

<sup>42</sup> All examples used in her study have been taken from the work of Sprinčák (1960).

structure. On that basis, she proposed the mechanism of case licensing of Old Russian nominative constructions and Finnic modal constructions to be identical. Then, case variation is an asymmetrical application in which the relation between lexical meaning and the function of a case is not congruent. The elements of the clause are rather part of lexical or functional domains at the same time. The object NP, as a lexical category, is merged in a specifier-VP with the nominative case. According to this approach, the case checking strategy is based on case features, i.e., linking or shifting, “under local asymmetry in either the lexical or the functional domain” (Jakab 2003: 63).<sup>43</sup> Therefore, NPs do not necessarily receive a case by moving. In Old Russian, case checking had to take place in the lexical domain. Two conditions were necessary for the realization of this linking mechanism: a) that the subject NP of the clause with a nominative case object must be oblique; b) that the verb must be non-finite or to a large degree defective. According to Jakab (2013), the accusative case is base generated in the complement position of the infinitive. The direct object is merged in specifier-VP with the nominative case which is “checked in situ”.

Jakab’s (2003) generalization can apply to constructions with an independent infinitive (NPiCs) or with a dependent infinitive and a modal predicate (SeCs-1), the only difference being whether the modal phrase (ModP) is filled or not. She illustrates this generalization with the following syntactic tree (71) for the sentence in (70):

- (70) example from an Old Russian text cited in Jakab (2003: 76), taken from Sprinčák (1960):

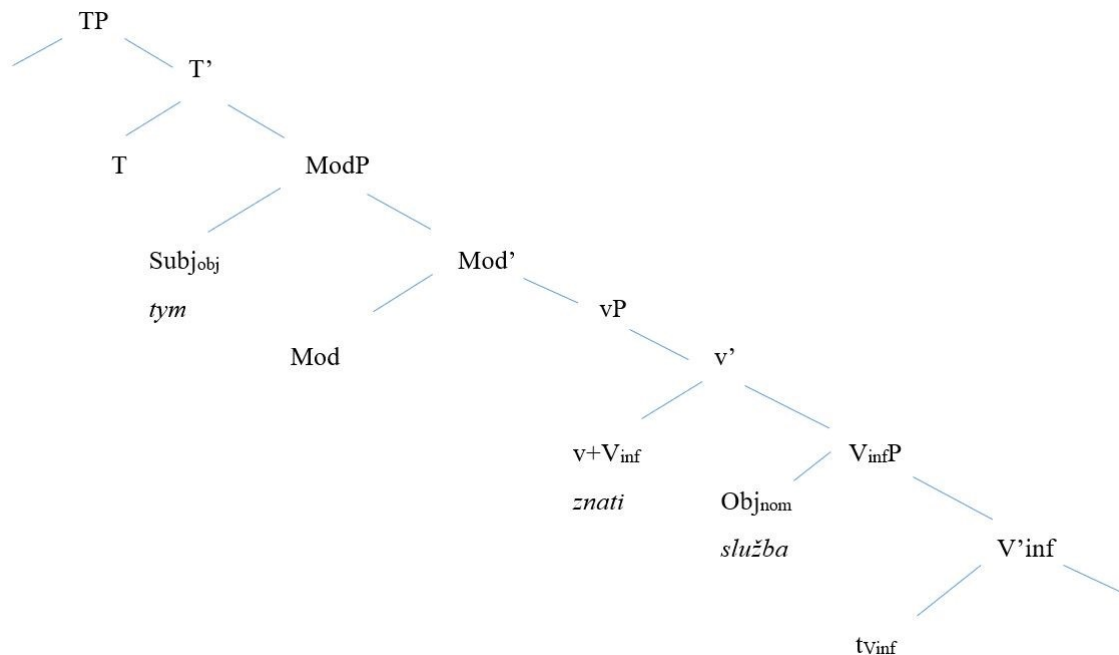
<i>Tym</i>	<i>znati</i>	<i>svoja</i>	<i>služba</i>
they-DAT	to-know-INF	own- NOM.F.SG	duty - NOM.F.SG

‘It is for them to know their duty’

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<sup>43</sup> Therefore, “case checking equals identification of case features under local asymmetry in either the lexical or the functional domain” (Jakab 2003: 63). Thus, NPs do not necessarily check a case by moving (morphological realisation of a case is not necessary anymore to relate to syntactic licensing). According to this hypothesis, case-variation by object marking differs in the case identification (case-features), i.e., linking or shifting (cf. Jakab 2003).

(71)



**Figure 1** The structure of the Old Russian modal construction according to Jakab (2003:77)

The above tree illustrates the mechanism of the object shift to the subject position. The NP of the direct object is merged with the nominative case in Spec-VP (therefore, case checking is in the lexical domain) if the modal presents an “invariant form” (lack of agreement with the subject and no  $\phi$ -features). If the modal is not invariant, the direct object receives the accusative case. This hypothesis seems to be more suitable than suggested by Timberlake (1974), Babby (1991, 2009) to explain case variation in object-assignment strategies in Old and Middle Russian (however, as argued above, the case variation in the NOC in Old Russian cannot be explained as rule-driven at all).

Another explanation for case variation in object marking was proposed by Zimmerling & Ron’ko (2015) within a discourse driven approach. They state that case variation is an instance of differential object marking, i.e. a result of the pragmatic (or semantic) function rather than of syntactic features of the constructions. The authors introduce an interpretation that includes two mechanisms of case licensing in Old Russian: a) the choice of the nominative in the NP of the infinitive clause indicates the “rhematicalization” and means that the former rhematic elements gets topicalized; b) another marker is that the former rhematic elements gets topicalized and is moved to Left Periphery. In Old Russian these two operations were optional. This leads in case choice in infinitival constructions. According to Zimmerling & Ron’ko

(2015), the case licensing strategy is related to the communicative purpose of the whole clause, with the alternation being based on the combinations of phrasal accents and generated by rules changing both linear order and/or accent markings characteristic of topics, foci etc.

In this light, the predictions of the classical raising theory (e.g., Postal 1974) are incorrect for three reasons. First, a subordinate infinitive clause in a raising structure does not always take the same position as the same clause with a finite verb. Second, the fact that the complement of an infinitive clause is marked with the nominative does not prove that this complement rose to the main clause. Finally, the absence of a subject in nominative is not a enough condition for marking the subject of an infinitive clause with nominative case. According to Yanko (2001), the case selection mechanism in Old Russian has a universal nature. The algorithm of case assignment is explained as a differentiated object marking mechanism motivated by the informational structure of the respective constructions. This hypothesis seems, however, difficult to prove, especially based on historical data.

Jung's (2010) proposal connects to the traditional point of view (cf. chapter 3.2.1). Similarly to Kwon (2009), she supposes the modal NPiC to have developed from the existential possessive construction, and suggests a reconstruction for the NOC in Russian as an innovation from possessive-to-modal based on three main hypotheses: First, Jung (2010) adopted Potebnja's (1958) hypothesis of the initial existential construction with a copula. Second, her interpretation of the parallelism between the be-possessive constructions and the existential construction is based on the typology suggested in Kayene (1993) and Bhatt (1997). Third, the development of the modal semantics of 'necessity' and 'obligation' correlates with the semantic map established by van der Auwera & Plungian (1998). Jung (2010: 389) formulates Potebnja's (1958) reconstruction for the initial construction with the copula *est* 'be' in terms of a recent generative framework and presents it schematically as following (72):

(72)

[ <sub>BEP</sub> BE	[ <sub>DP</sub> P	[ <sub>NP</sub> DP	<sub>DATj</sub>	NP <sub>NOMi</sub> ]]	[ <sub>DP</sub> [ <sub>NP</sub> PRO <sub>j</sub>	VP	<sub>Ei</sub> ]] <sub>DAT</sub> ]
<i>est</i> '		<i>Rusinu</i>		<i>pravda</i>		<i>vъzъtiju</i>	

This scheme presents an existential construction which should then be bi-clausal and contains an overt existential marker *be* (*est*'), "verbal noun (*vъzъtiju*), which is represented as a mixed



category of nominal and verbal projections, this construction consists of a dative subject and a nominative theme. The dative possessor controls the PRO<sup>44</sup> subject of the adjunct verbal noun.

In Jung’s (2010) opinion, this initial construction of the modal NPiC resembles a possessive structure,<sup>45</sup> i.e. a special type of the existential construction (cf. e.g., Isačenko 1974; Heine 1997; and for a detailed explanation which constructions are called possessive in Russian, cf. Jung 2011: 38–45). Later, due to grammaticalization, the purposive dative became an infinitive, leading to the reanalysis of the infinitival object into the nominative. This again triggered “the removal of the possessor role” from the nominative (cf. Jung 2010: 388, 393). Different micro-changes in the construction lead to the “simplification of the argument structure” from the above mentioned (90) to the following in (73)<sup>46</sup>.

(73)

DP <sub>DATi</sub>	(BE)	t <sub>i</sub>	INF	DP <sub>ACC</sub>
<i>mne</i>	∅		<i>delat’</i>	<i>eto</i>

Moreover, in spite of the lack of direct evidence for this exact scenario, Jung’s (2010) argumentation relies on two facts: first, the appearance of the Dative-Infinitive (deontic) Modal construction (or DIM; in my terminology NPiC) in Old Russian texts, and second, the similarity of morpho-syntactic properties and semantics of two other DIM variants, namely the prepositional-infinitive possessive construction (or PIP in Jung’s [2010] terminology) and the dative-infinitive existential construction (or DIE). The core idea of her study is that, due to the process of the grammaticalization of the DIM construction, the change of a grammatical item

<sup>44</sup> In numerous generative studies, the abbreviation PRO is used for a ‘covert’, phonetically empty subject.

<sup>45</sup> The possessive structure was extensively discussed by Bhatt (1997) and Kayene (1993) and used for argumentation by Jung (2010).

<sup>46</sup> The loss of the existential semantics, the emergence of deontic modality, and the shift of the existential *be* to the auxiliary *be* appeared to result from independently motivated argument-reducing innovations. The mutation to an auxiliary *be* must have ensued when the nominative argument was reanalyzed as the infinitival object, triggering the removal of the possessor role. The loss of the overt *be* in the present tense signals the completion of the possessive-to-modal shift. The semantic change from an existential to a modal construction also shifts from the ‘existential’ *be* to the ‘auxiliary’ *be*, and then, it is construed as a change of the functional head, to which *be* merges within IP, as illustrated in (40). Several changes in the argument structure occur. In Russian, overt *be* (*est’*) marks the existential domain (Kondrašova 1996, Harves 2002). If we assume that the nuclear scope (existential domain) is AspP in Russian, following Harves’ proposal (2002), the semantic change of possession/existence to modality must be viewed as the shift of the AspP to the ModP, both of which are IP-level functional layers.

to another grammatical element has happened (Jung 2010: 393-395). She reconstructs that the shift from nominative subject marking to nominative object marking has happened immediately. Therefore, the grammatical functions of the argument have changed, while the old forms were preserved (the so-called direct object marking voice).

To sum up, according to Jung (2010: 378–390), the modal NOCs in Russian arose from the possessive construction and a shift from a possessive to a modal construction can be assumed, in which “the possessor phrase came to denote the agent of the event the possessed noun undergoes” (Jung 2010: 381). The “change is construed as the shift of *be* from the Asp projection to the Modal projection” (Jung 2010: 394). On the other hand, “the surface dative argument representing two thematic features came to denote only one feature — the agent originating from the infinitive” (Jung 2010). Therefore, she proposed

[...] a shift from a structure containing four different thematic features to a structure with two. The nature of innovation is to reduce thematic features / argument structure and the locus of the reanalyze is overt arguments. The motivation of the reanalyse is both semantic and structural, namely the removal of featural ambiguity of overt arguments. (Jung 2010: 395)

Fig. X / Example (74) gives an overview of the different stages in the development of the NOC as proposed by Jung (2010) (74) (Jung 2010: 393, table N 33 “Different derivational stages of the three Russian constructions PIP, DIE, and DIM from the posited initial structure”):

(74) a. Hypothetical original structure (4 thematic features)

DP<sub>DAT4</sub> BE<sub>EXIST</sub> DP<sub>NOM3</sub> PRO<sub>2</sub> VN e<sub>1</sub>

b. PIP (4 thematic features)

PP<sub>GEN4</sub> BE<sub>EXIST</sub> RelPron<sub>3+1</sub> PRO<sub>2</sub> INF t<sub>1</sub>

c. DIE (3 thematic features)

DP<sub>DAT2</sub> BE<sub>EXIST</sub> RelPron<sub>3+1</sub> t<sub>2</sub> INF t<sub>1</sub>

d. DIM (2 thematic features)

DP<sub>DAT2</sub> (BE) t<sub>2</sub> INF DP<sub>ACC1</sub>

\*where PIP – PP-infinitive possessive construction, DIE – dative-infinitive existential construction, DIM – dative-infinitive modal construction.

The above discussion underlines that there still is no agreement about what exactly drives the choice of construction. The problem is that most studies mentioned limit themselves to essentially mono-factorial models based on analyses of single manifestations of such constructions (e.g., only examples of the NOC or the AOC constructions, as in Dunn 1978). Others rely on a small data basis and describe only very few manuscripts (and often in later editions). As a result, the lack of statistical data leads to fragmentary observations on the distribution of the constructions and creates a false impression regarding the distributional properties of the NOC and AOC constructions in the history of Russian.

Moreover, the definition of the subject or object as the nominative argument also seems problematic when it is based only on its coding properties. To classify the nominative as a distinct case of the object is difficult in these constructions. It seems to be more promising to observe the changes that the subject and object properties of the nominative in these constructions underwent over time, as well as the coding properties and the rule application or use of a non-canonical nominative instead of the accusative for the patient argument. In the diachronic investigation of NOCs we are even confronted with a series of changes, which, in some contexts, can be explained as motivated, while they hint at free variation in others. For this reason, diachronic and typological linguists use the extended methods of corpus linguistics to diagnose and test interactions of properties which are expected to occur in a category, and, if the respective properties do not occur, to explain what impeded their occurrence. Such investigations could also shed light on the question whether such a phenomenon is an instance of a language-specific variety or whether it displays cross-linguistic similarities. Corpus-linguistic methods thus help to understand the nature of motivated changes.

Dunn (1978) was the pioneer who suggested to use a multifactorial approach, which, however, requires special techniques that were not available at his time. The new methods of statistical analysis for linguistic data now comes to grips with huge variability in small data sets (samples) and helps to simultaneously analyze different factors in different time periods. However, Dunn's (1978) work provided a strong motivation to address these issues and search for a more adequate explanation of this case variation and micro-change(s) using a multifactorial corpus-based analysis. In this analysis, it should be possible to identify temporal stages of those micro-changes and factors that have been involved in, and hence presumably drove, these changes.

### 3.4. The Competing Grammar Approach

The main question is how to model the observed gradualness of syntactic change within a generative parametric theory of change. In the framework of generative grammar, linguistic change and variation in language also underwent new interpretations. Essentially of generative variationist studies to explain the seemingly random distribution of variation in grammar, its restrictions, and mechanism of emergence as well as the subsequent elimination of one variant from grammar (e.g. Bailey 1973; Kroch 1989, 2000; Fischer 1990; Pintzuk 1999; Zimmermann 2012; among others). In recent years, the Competing Grammar Approach (from now on: CGA) became especially popular in diachronic studies. This framework connects the generative approach and a sociolinguistic variationist approach (Labov 1975). Linguistic variation (in one language) is determined by a finite set of parameters which, in the best case, should have binary characteristics yielding different parameter settings. Linguistic change is understood as a gradual process which may take centuries and produces different kinds of language variation. The so-called Competing Grammar Hypothesis (CGH) suggests that the grammar of natural languages does not tolerate optionality and that change in syntax “proceeds via a competition between grammatically incompatible options which substitute for one another in usage” (Kroch 1994: 180). Therefore, according to Kroch (1989) and other scholars (cf., e.g., Pintzuk 1991; Santorini 1989), syntactic variation does not only pertain to different parametric options, but also reflects “the co-presence in a speaker or speech community of mutually incompatible grammars” (Kroch 2001: 720). The understanding of competing grammars is closely related to the understanding of synonymy in language. CGA is an extended approach which allows the co-existence of two competing grammars. A grammar is then represented as a set of competing rules and can be described quantitatively by studying relative frequencies of competing forms, structures, or constructions. Variation between grammars is conceptualized as a shift from one parametric option to another one. Coexisting “doublets” of parametric options are possible and not always caused by internal linguistic factors, but also “by features of context and situation” (Kroch 1989: 3). Therefore, the main theoretical concern of CGA is the identification of drivers for changes in the parametric setting and the temporal course of these changes. Moreover, it is interested in how variability in parametric options of syntax can be explained during periods and change from one setting to another.

In the sense of Kroch (1994), the basic assumption of CGA is that different kinds of language variation and diverse options between diverse categorical variants are cases of competing

grammars. The choice of a variant is based on a mixture of different grammatical options. Thus, the mechanism of change is often explained as the result of *reanalysis*, which may be established after a structural ambiguity has emerged over time. This fits the view of language change as innovation and includes the idea of parameter resetting (for discussion cf. Roberts 2007).<sup>47</sup> Some changes can be explained as the result of a second mechanism, i.e. *analogy* (or *extension*), which can take place either systematically (by including specific classes of lexemes or patterns) or non-systematically. Moreover, CGA explains the inconsistent use of two variants in certain historical periods effected by the influence of extra - or intra-linguistic factors, such as register variation or language contact.

As mentioned above generally diachronic studies proposed that language change can be identified statistically and that the relative frequencies of two variants (from texts of different periods in question) can be used to also analyze the spread of an innovation (a new variant) by identifying the initial stage and observing its spread over time.<sup>48</sup> The most significant work in this field is Bailey (1973), who developed a model of language change (the so-called “wave model”) and demonstrated how change can be measured statistically. He proposed a quantitative model based on measuring the frequency of use of old and new forms or variants, demonstrating that the propagation of a new variant typically takes the shape of an S-curve<sup>49</sup>: Over time, one form or variant replaces another, beginning very slowly, but then accelerating the gradual replacement of the original form in the middle stages and finally reaching the point of change where the original form becomes rare and gradually disappears. Bailey (1973: 77) suggests: “The statistical differences among isolates in the middle relative times of the change will be greater than the statistical differences between the early and late isolates”. This approach is useful in the diachronic investigation of language change because it allows to use multifactorial methods and to analyze linguistic phenomena in their complex nature. All studies undertaken in this framework, and partly in expanded versions of it, showed that these methods can be used as a tool in order to understand the process and mechanism of diachronic change. As Yang (2000: 248, also in 2002) summarizes the advantages of this approach: The model

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<sup>47</sup> From a historical perspective, the mechanism of reanalysis can be interpreted as a grammaticalization: the lexical item becomes functional (cf. Roberts 1993).

<sup>48</sup> However, the main criticism of this sort of approach was formulated by Roberts (2007): “the lack of economy” (how many grammars does a language use?). It is, however, not the aim of my work to compare different points of view, while providing an expanded theoretical model for the analysis of language variation in syntax.

<sup>49</sup> <http://www.helsinki.fi/varieng/series/volumes/16/nevalainen/> Descriptive adequacy of the S-curve model in diachronic studies of language change (Accessed: 02.03.2017)

formalizes historical linguists' intuition of grammar competition and directly relates the statistical properties of historical texts (hence, acquisition evidence) to the direction of language change. It is important to recognize that, while sociological and other external forces clearly affect the composition of linguistic evidence, grammar competition as language acquisition (the locus of language change) is internal to the individual learner's mind/brain.

The above section (#) illustrates that most approaches try to explain the mechanism of case licensing by analyzing one factor at a time or by focusing only on inter-linguistic factors. If, however, the interplay of different factors is not analyzed simultaneously, the process of historical change and variation cannot be captured properly. Moreover, if these approaches were appropriate, they would apply to a wide range of phenomena. These explanations are either based on one or another constructional variant or a complementary use of the NOC and AOC constructions. However, they do not account for the change in use over time and, therefore, cannot explain all instances of corpus evidence. That, however, is essential for diachronic language studies.

Timberlake (1974) proposed different factors for the choice of the construction, it was not possible for him to compare all the factors and their effects on the changes. Babby's (1991) generalization, on the other hand, is well suited for the later period, but cannot explain why the accusative is also possible in the same syntactic environment that already existed in the earliest attestations. In fact, in Finnic as well as Old Russian sources, the accusative object in such an environment frequently occurs as a nominative object. Likewise, Ronko & Zimmerling's theory (2015) of differential object marking is not particularly adequate for explaining of case licensing in such constructions. It rather apprehends case variation as "unmotivated" or "occasional". Moreover, it cannot explain why elements that are more referential or thematically higher are more likely not to move into a preverbal position (moving to the left periphery), but rather stay in the postverbal position.

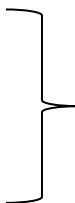
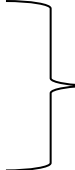
To sum up, it seems challenging to find a model that at the same time accounts for the different criteria and explains several syntactic and semantic shifts in the constructional variants of the NOC construction based on the complementary application of one rule only.

Among recent approaches to a diachronic description of syntactic variation and language change, CGA provides a useful framework in searching for an explanation for case variation in

infinitive constructions in the history of Russian. In the empirical chapters of this study, I thus follow this approach combining its theoretical parametric assumptions with corpus evidence.

This section lists all linguistic and extralinguistic factors in order to examine their actual effect on the choice of NOC or AOC constructions and the change of their applicability in different time periods. Probably following Timberlake (1974), recent theories treat NOCs in Russian same as in Baltic languages (since he explains the origin of the old Russian NOC due the language contact) as impersonal, subjectless, constructions. Holvoet (2003: 363–389) showed that in Baltic and Finnic impersonal and passive constructions are connected closely and could have similar constructional domains in their realization (due the contamination different constructional types could be mixed), but on the other hand, they should than have had different initial stages otherwise they will be in complementary distribution. In the same vein, traditional works on the NOC construction in Russian already mentioned a possible connection of case marking to passive voice without discussing it in detail (e.g., Stepanov 1984). They then argued for a shift in the subject-object functions of the nominative noun with respect to the modal semantics of NOCs. I will now proceed to some of the latest studies on the phenomenon in focus that investigate the diachronic change of these constructions from a purely syntactic perspective<sup>50</sup>. The following factors (or variables in terminology of corpus linguistics) and require consideration in the investigation:

**Table 5** Factors (variables) potentially favoring the non-canonical object marking in the NOC

Variable	Options	
grammatical subject (dative logical subject = oblique subject)	+/ –	 Language internal Factors
animate noun	+/ –	
word order	Pre- or postverbal position	
style	high literary style/ dialect, low style	 Language external factors
Geographical restrictions	northern Russian dialectal area/ no restrictions	

<sup>50</sup> (for an overview about the most important works on the Russian nominative object construction and a detailed discussion, cf. Jakab 2003).

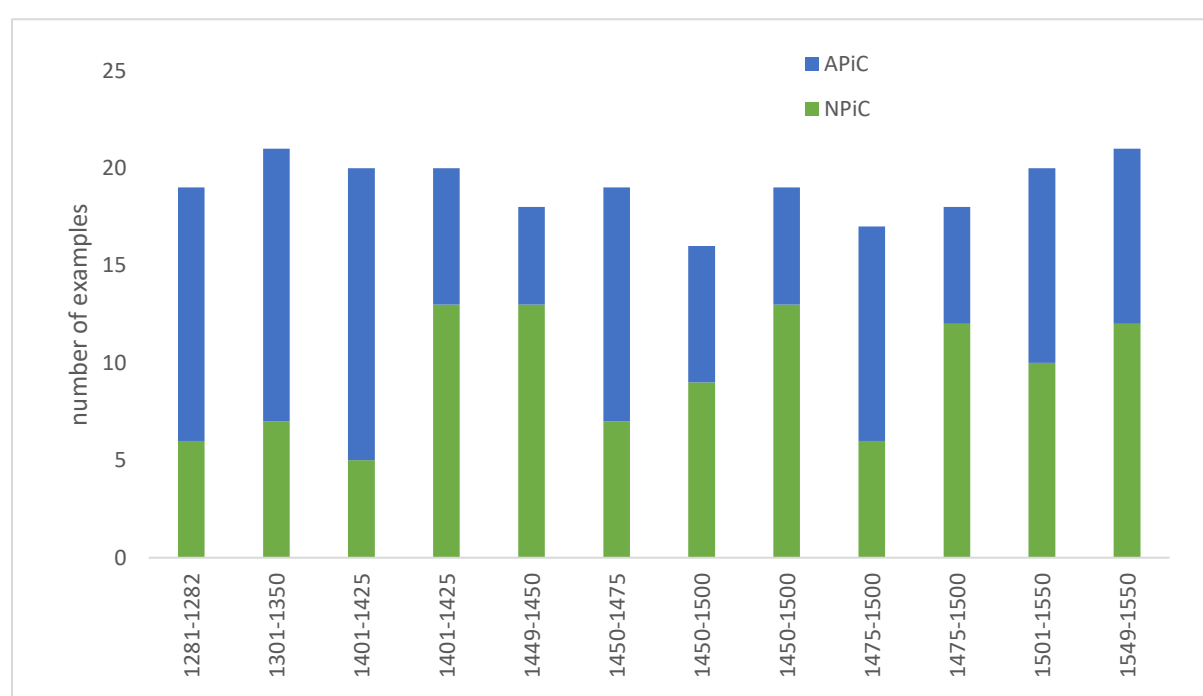
As table (5) shows, the variables have two or more qualitatively different levels (options). For the present study, the effect of all the factors listed above was tested statistically across two-time periods (Old and Middle Russian). Additionally, also location (“geographical restriction”) where a text was written (if known) and the pre- and postverbal position of the logical dative subject with respect to the infinitive verb was included in the investigation. The corpus data was partitioned into fifty-year, forty-year and twenty-year time slices for different analytical purposes. This technique is useful to identify trends in the use of the constructional variants.



## 4. Data sources and methodology

### 4.1. Motivation

Dunn (1978) was among the first to describe the behavior of the and the APiC and their distribution in Old and Middle Russian texts. He analyzed 35 texts and compared different variants of the NPiC and/or the APiC by comparing their use NPiCAPiCin 12 different copies of *Russkaja Pravda* (all in all, there are over 100 copies and two main editions, the first one dating from the 13<sup>th</sup> c. and the last one from the 16<sup>th</sup> c.)<sup>51</sup>. The following graph shows his results in chronological order (with the NPiCs marked green and the APiCs marked blue: Figure 2):



**Figure 2** Distribution of the NPiC and the APiC in different copies of *Russkaja Pravda* ref. Dunn (1978: Appendix I).

From this material, Dunn drew two generals, and indeed surprising, conclusions: First, every copy of *Russkaja Pravda* (RP) contains both NPiC and APiCs. His second notable observation was that in early copies of RP, that is, in the Old Russian period, the APiC seems more frequent than the NPiC. Moreover, he also noted the absence of contexts in which the NPiC was used

<sup>51</sup> *Russkaja Pravda* “Russian Law” describes judicial and socioeconomic problems of princely and boyar estates. In reference literature, a widespread opinion contends that the *Russkaja pravda* was a record of the norms of Eastern Slavic common law. It is hard to say how plausible this viewpoint is. Nevertheless, it is believed by most of researchers that this text provided the basis for the first written documents of ancient Russian codified justice that survive to this day.

with an auxiliary verb (that would agree with the nominative noun), although examples with an accusative were found. Therefore, Dunn concluded that: Under his approach, the NPIC would then be a later development in which, "under certain circumstances", the accusative was replaced by the NPIC. It seems that the empirical evidence and Dunn's arguments conflicted with traditional theories (e.g., Potebnja 1958) supposing that the original status of the nominative noun in this syntactical context was that of the subject and not an object, and also with Timberlake's "Nominative Object Theory" presupposing that the noun marked with the nominative in the object position was originally used with independent infinitives, which, however, did not apply to the accusative case.<sup>52</sup> However, Dunn came to the conclusion that: "attempts to draw a distinction between the two cases based on morphological or lexical factors are generally unsuccessful" (Dunn, 1978, IV). In his opinion, it is not only speculative, but impossible, to reconstruct the origin and development of the NPIC in Russian, because of the lack of "real" evidence from the earliest, prehistorical Russian<sup>53</sup>.

My own research started from this point, with the aim of analyzing this alternation of case licensing with the new quantitative techniques of corpus linguistics, in accordance with the works of Gries (2003), Gries & Hilpert (2010), Baayen (2008), and Meyer (2010, 2011, 2012). Most of the linguistic material I have analyzed comes from the Regensburg Russian Diachronic Corpus (RRUDI: <http://rhssl1.uniregensburg.de/SlavKo/korpus>)<sup>54</sup>. Secondary sources were used to corroborate the relevance of the preliminary results, that is, various other diachronic online corpora available for Russian (e.g., different subcorpora that are part of the Russian National Corpus<sup>55</sup>), historical material from theoretical works and primary texts, as well as

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<sup>52</sup> Later studies by Ron'ko & Zimmerling (2015) and Zaliznjak (2004) demonstrated that even in the earliest texts from Novgorod, such as VK and the birchbark documents, the accusative also predominates. However, a more detailed analysis of different copies of VK also showed that the APiC construction was used only in contexts with dependent infinitives.

<sup>53</sup> "It thus remains to conclude that the material available in the oldest surviving Russian texts, while permitting a somewhat tentative reconstruction of the earliest usage and the development of the Nominative and Infinitive construction in Russian, does not provide any single satisfactory explanation for its origin" (Dunn, 1978: 144).

<sup>54</sup> See more also Meyer (2003, Meyer & Betsch, 2003a, 2005 2007).

<sup>55</sup> NKJR: Natsionalnyy Korpus Russkogo Jazyka (<http://www.ruscorpora.ru/> (accessed: 10.10.2016)).

some lexemes in the *Kartoteka Slovarja drevnerusskogo jazyka* (11<sup>th</sup> to 17<sup>th</sup> c., KSDR, Moscow)<sup>56</sup>, especially for qualitative analysis.

To give a detailed description of the behavioral characteristics of each constructional variant, the data from a specialized diachronic subcorpus for Old and Middle Russian was sampled, and all possible constructional variants with an infinitive and a nominative and/or an accusative were annotated. Then, through substantial manual annotation, I derived extensively annotated datasets that characterize each variant of an NPiC or APiC in the dataset according to the explanatory variables that were to be tested. The results were, however, also verified with other available resources (see Data Description). This analysis encompassed three steps:

1. a distributional analysis
2. a multivariate analysis
3. a qualitative analysis

Below, the source of the data analyzed for this work will be presented, and the methods and results of the corpus analysis will be discussed in more detail.

#### **4.2. The subcorpus CHaRLi**

To give an overview of the primary and secondary data sources, some preliminary assumptions need to be briefly discussed. Because the main data sources for this study were different diachronic corpora for the Russian language available on-line, it must be taken into account that there are structural and conceptual features that distinguish a linguistic corpus from an electronic text archive. A diachronic corpus is often a "specialized corpus" designed with a specific focus on particular research goals.<sup>57</sup> The diachronic corpus will be understood here as a textual resource available on-line that represents comparable types of language use (in different varieties and text types) over sequential periods of time, including metadata

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<sup>56</sup> KSDR : Kartoteka Slovarja russkogo Jazyka XI – XVII vv., Institut russkogo Jazyka RAN, Moscow.

<sup>57</sup> As Leech (1991: 27) states: "A corpus is thought to be representative of the language variety it is supposed to represent if the findings based on its contents can be generalized to the said language variety".

information about its sources. Two essential structural features that characterize a linguistic corpus are:

- an additional interpretative linguistic annotation that can entail different types (morphological tagging, syntactical structure, semantic structure, or marking of constructions).
- metadata about the data source itself (author, year of publication, geographical edition information, category of text, type of document, etc.).

Three additional features that are conceptually closely related should also be considered in corpus design (not only in the design of a historical corpus): 1) representativeness, 2) balance of the corpus, and 3) principles of sampling. As corpora that fit the research goal of my study did not yet exist, I built up a corpus on my own. The criteria I followed in the choice of texts were: 1) comparability of different time periods and variability of text types that represent the so-called Old and Middle Russian chancellery language, 2) representativeness of the material according to the research topic, and 3) a specific syntactic annotation that allowed me to extract syntactic structures (e.g., with respect to their morphological features). This type of subcorpus should also include metadata about its sources. Diachronic subcorpora of the Russian National Corpus do not yet have this option and so could only partially be used (or else used as reference corpora).

As already mentioned in Chapter 1, this study is part of the second stage of the research project “Corpus Linguistics and Diachronic Syntax II: Subject Case, Finiteness and Agreement in Slavonic Languages”<sup>58</sup> funded by Deutsche Forschungsgemeinschaft (German Research Foundation). It is strongly based on the methodological, theoretical, and practical guidelines developed in the previous project “Corpus Linguistics and Diachronic Syntax I: The Grammaticalization of Non-Canonical Subjects in Slavonic Languages”<sup>59</sup>. During the first phase of the project, two diachronic corpora for Russian (Regensburg Russian Diachronic Corpus – RRuDi) and Polish (Polish Diachronic Research Corpus – PolDi) were created as part of the tasks that were formulated mainly for the research goals of the first project. The

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<sup>58</sup> DFG HA-2659 1-2; Project leader: Prof. Dr. Roland Meyer, Humboldt University of Berlin. More information on the project may be found under: <https://www.slawistik.hu-berlin.de/de/member/meyerrol/objekte>.

<sup>59</sup> Prof. Dr. Roland Meyer, Prof. Dr. Björn Hansen, Prof. Dr. Ernst Hansack, and other team members

composition and implementation, the coding flow, and the linguistic annotation of both corpora RRuDi and PolDi have been described in detail in Meyer (2012: 33-48).

In the present project, however, the annotation procedure was elaborated upon and therefore also included independent layers of annotation in the form of syntactic segmentation (in clauses and constructions), tokenization, and a morphological mark-up. Moreover, in the second part of the project, it was also possible to expand these corpora by a diachronic corpus for Middle Ukrainian (MuDi, for a description cf. Parkhomenko 2016) and one for Bosnian/Croatian/Serbian. During my work on the research project at the Humboldt University in Berlin, I had the opportunity to build my own subcorpus as part of the large diachronic Russian corpus (RRuDi) and named my subcorpus CHaRLi, as a diachronic subcorpus for the Russian language in the variety of chancellery texts, therefore: Chancellery Russian Language.

The CHaRLi subcorpus includes, all in all, more than 250 different texts dating from the end of the 12<sup>th</sup> to the end of the 17<sup>th</sup> century. I divided all the texts into two periods: The Old Russian period (12<sup>th</sup> c. - 14<sup>th</sup> c.) and the Middle Russian period (14<sup>th</sup> c. - end of the 17<sup>th</sup> c.). Most of these texts were scanned and “OCRed”, that is, checked by the OCR tool (Optical Character Recognition within a FineReader) from different copies, which were then imported and annotated in a GATE tool (General Architecture for Text Engineering), which is a tool for natural language processing of resources working with machine-readable formats like XML that helps to create a new application pipeline, or can be used in order to run a specific uniform process across a group of documents, or to combine and manipulate the automatic and manual annotation to create an individual annotation. Then, the linguistic data with the additional annotation relevant for the study were exported and evaluated in the statistics software R (for further information, see <https://www.r-project.org/>). In order to describe and compare the behavior of different infinitive constructions with noncanonical nominative or canonical accusative object marking, it was necessary to have a corpus of texts that is annotated in a way that allows a statistical analysis of the results. The selection of texts for this corpus was primarily based on previous theoretical works and on a comparison of different diachronic corpora and sources for which this construction type has been attested. Of course, not all sources could be included (because of the technical limits of the corpus design), but all texts were sorted carefully according to different criteria and the highest frequency of the construction. As one of the purposes of this study was to analyze and test the significance of the interplay of different intralinguistic and extralinguistic factors that could account for the salience of a particular

feature or tendency in the use of one or other constructional variant at different time periods, the corpus data were sampled, balanced, and annotated with respect to a range of significant variables. As discussed in Chapters 2 and 3, the use of the nominative object constructions was not restricted to a specific genre or text type, but rather by its specific pragmatic profile and therefore frequently occurs in "chancellery language". This is a clear case of register variation, because the context of the formal or quasiformal documents and the use of lexical-grammatical and discourse-semantic patterns were associated with situational contexts. The choice of use for one or other specific feature or construction was made by speakers depending on the function of the language in the discourse, or on the situational contexts (cf. Halliday & Hasan 1989: 44). In contrast, different genres may invoke more than just one register (for the differentiation of "genre", "register", and "style", see Chapter 2.2). Therefore, one could also speak of register variation itself. In traditional historical Russian linguistics, the term "*usus*" is often used (cf. Chapters 2). So, Živov (1996) suggested calculating the proportions of "bookish" and "nonbookish" elements and the status of variants in order to be able to distinguish between registers, which, in his opinion, could be mixed in written texts. This assumption is based on the main feature of *usus*, its "continuity" (Rus.: "*preemstvennost*"). The distribution of the NPiC in different text types and genres showed that the use of this construction was motivated more and more by its pragmatic profile, so that the variant - the NPiC - that was once occasional became a norm or feature of the *usus* ("usage") and then possibly became a feature of the register. Therefore, to analyze the distribution of different types of NPiC and APiC and their features, I will use the prototypical text categories, that is, *statutory texts* and *hybrid texts*, which are described in more detail below. The distinction between statutory texts and hybrid texts is useful in view of the Old and Middle Russian samples (similarly in the Helsinki Diachronic Corpus<sup>60</sup>), because it would have been difficult to find Old and Middle Russian genres in which the genres did not overlap.

#### 4.2.1. Corpus composition

The texts in CHaRLi are divided into macro-varieties based on textual and external, that is, pragmatic, characteristics and balanced regarding the sorts and types of texts per period. The macro-varieties are the Old and Middle Russian periods and the prototypical text categories. A further division into subsections was designed to permit the data to be contextualised and to

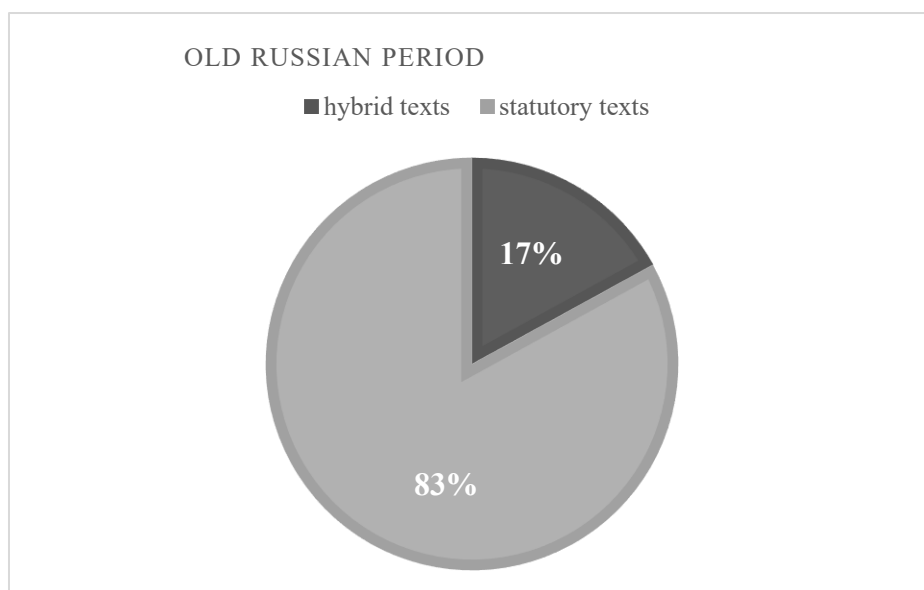
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<sup>60</sup> see: <http://www.helsinki.fi/varieng/CoRD/corpora/HelsinkiCorpus/textcategories.html> (accessed: 09.10.2016)

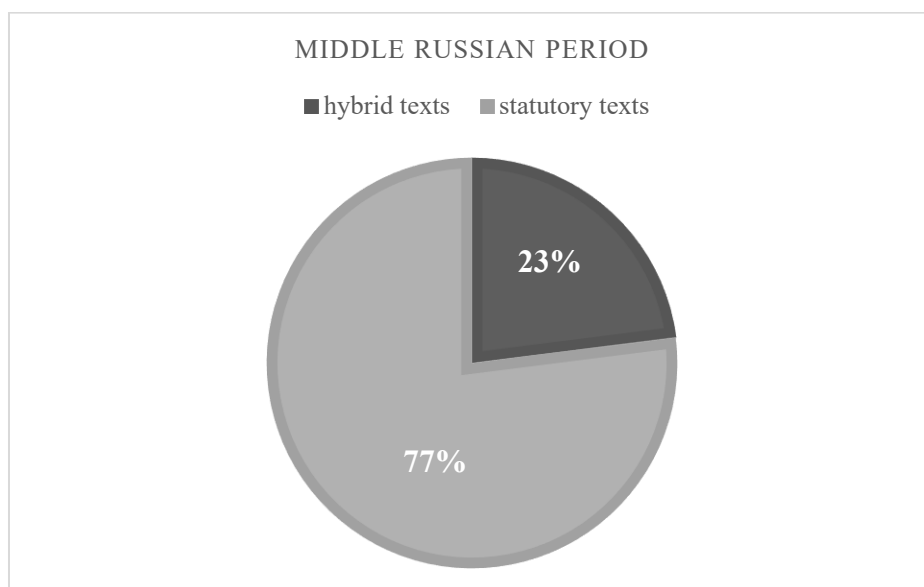
make it easier to compare the results with those of other corpora and thus to reduce the researcher's subjectivity to a minimum.

First, the texts were divided into two main text categories. The first prototypical text category is called *hybrid texts* and contains quasi-official sequences of texts, with parts of profane and/or religious texts. The second prototypical text category, *statutory texts*, comprises different types of official and legal documents (marked dark gray in the table above). Second, the textual mark-up scheme contains seven different text-type labels: records (writs), treaties, charters, canon law, codes of law, letters, and advice. This categorization was made according to the categories used in the previous literature. Geographical information about the source texts was also identified (30 instances).

The decision to subsume all these texts under the category of "chancellery language" indicates how difficult it is to draw a rigid borderline between specific genres and types of such texts. The language of all these written documents differs from the standard and has specific, unique features. Moreover, these texts, despite their formal character, show a conspicuous variation in the use of syntactic constructions. For example, alongside the established collocation (Rus.: *ustojčevye vyraženiya*), words specific only to these texts or regions were used. The main purpose of the texts was to establish and govern the relations of a medieval person with the people around them, and to resolve new social conflicts. A constant process of changing in these texts themselves manifested itself in their variations and re-editions and was connected to the changing realities of urban life in medieval Kievan and Muscovite societies, the emergence of new authorities, and the demarcation of borders. This grouping of research material allowed me to analyze the use and distribution of the constructions in a broader context and compare the results regarding two periods - Old Russian and Middle Russian (Figure 3 and Figure 4).



**Figure 3** The Old Russian period in the CHaRLi corpus: distribution of text categories.



**Figure 4** The Middle Russian period in the CHaRLi corpus: distribution of text categories.

Usually, texts with "chancellery language" (i.e., with formal language) constitute two main groups: 1) documents of secular authority (Rus.: *dokumenty svetskoj vlasti*) and 2) documents of the Orthodox Church (Rus.: *dokumenty cerkovnoj vlasti*). The so-called secular-legal documents (Rus.: *svetsko-delovye*; *svetsko-pravovye*) were created to govern relations establishing any contractual terms between the authorities, social groups, and private individuals or expressing certain orders directed to some groups or individuals. In the early period, the first group of secular-legal documents included certain contractual terms (Rus.: *dogovornye dokumenty*) and orders or documents for the registration of persons or events.



Later, in the Middle Russian period, they included the so-called judicial-procedural documents. The *Russkaja Pravda* (RP), the first Russian law code, is considered one of the early sources of such legal documents in Old Russian. Later, in the medieval period, similar statutes (Rus.: *ustavy*) were the Pskov and Novgorod judicial charters, although these were of narrower territorial significance. The second group included documents governing relationships or delineating the duties and obligations of church members (Rus.: *cerkovno-delovye*; *cerkovno-pravovye*).<sup>61</sup> In Table 6, the most important features of these text types are briefly summarised without a detailed description that would lead beyond the scope of this research.

**Table 6** Description of text types included in CHaRLi

Type of Text	Description:
Report <sup>62</sup>	Documents fixing the conditions of various kinds of contract and transaction between individuals.
Charter	Usually documents made in order to form an institution or committee. They contain the guiding rules and regulations for the function of that institution or committee. They may also lay down certain restrictions for outsiders or participating countries.
Treaty	A treaty is an international agreement signed between two or more nations regarding specific or general subjects.
These three types of documents are, to a certain extent, related to legal documents containing instructions, impositions, etc. They are related to the group of public documents in the form of reports, charters, and documents and were compiled by both church and secular authorities and, at times, differed only in subtype (see below).	
The canon law	An aggregate of canonical instructions. Most commonly, they are the written policies that guide the administration and religious ceremonies of the Orthodox Church.

<sup>61</sup> For example, this includes documents such as Kirikovo Voprošanje (VK) (12<sup>th</sup> c.) sometimes defined as a hybrid document due to the dissimilarity of language and content.

<sup>62</sup> In CHaRLi, however, they are named “acts”.

The code of law	A statute rolls.
Advice	These texts contain pieces of advice.
According to their contents and linguistic features, these types of texts often had a hybrid character.	
Publicity	Texts that can be subsumed under the category of opinion journalism

This division into two groups is to some degree reflected in the language, too. For instance, formal church documents are characterized by the presence of Church Slavonic terms. In contrast, secular documents were closer to the vernacular, or displayed the influence of Latin, German and other West Slavonic formal languages. Both groups included various types of text depending on their specific application. In the ChaRLi subcorpus, these types were highlighted, and diverse documents were grouped together. However, their distribution in the corpus is heterogeneous, because the acquisition of research material was carried out with respect to the presence of the NPIC phenomenon. Documents in both groups can be subdivided into eight types. Within each type of text, there are again subtypes.

Among these texts, various subtypes were distinguished. Due to the emergence of new culture-specific elements, new subtypes emerged. The corpus features various subtypes of these texts. For example, different types of charter were presented in all their diversity in the corpus, depending on their purpose, such as, *žalovannye gramoty*, which were already attested to in the 12<sup>th</sup> c.), *ustavnye gramoty* (since the 12<sup>th</sup> c.), *tamožennye gramoty* ('customs charters', since the late 15<sup>th</sup> c.), *zemskie gramoty* ('land charters', since the 15<sup>th</sup>/16<sup>th</sup> c.); *ukaznye gramoty* ('edicts', administrative in nature), *poslušnye gramoty* ('property register charters'); *duchovnye gramoty* ('last wills'). Occasionally, some charters were written by church authorities as well. If they were related to the first group of texts, they usually contained orders of superiors or a church authority regarding the organization of the local administration (Rus.: *namestničije*, *gubnye* 'law-enforcement charters', Rus.: *tamožennye* 'customs charters'). The earliest charter is the *Dvinskaja gramota* 'charter from Dvina city' (dated to the end of the 14<sup>th</sup> c.) issued by the Great Prince's chancellery and determining the order of interaction and division of competencies for representatives of central and local authorities. This charter is now included in CHaRLi. Frequently, these charters were organized as writs (or reports) serving to regulate the norms of substantive, civil, and criminal law. Beside these documents, CHaRLi includes documents

establishing legal procedural relations (Rus.: *sudebno-procesualnye*) or the registration of population or territory, etc.

These were different charters (boundary charters or edicts or the so-called boundary-defining charters – Rus.: *raz'ezžaye gramoty*). There were also different types of identity charter: immunity charters (Rus.: *opasnye gramoty*), credit (Rus.: *veritel'nye gramoty*) and verification letters (Rus.: *spravka*), or documents of contractual/legal type, such as spiritual charters (issued “for the soul”) and present-day last wills and testaments. They expressed, for instance, the last will of a man concerning the disposition of property, house serfs, etc. Such documents included the property register charters (Rus.: *poslušnye gramoty*) used since the mid-16<sup>th</sup> c. They were issued when the owner of real estate changed. The charter expressed the necessity to obey a new landlord and defined the conditions of land use. Church authority enactments could also include charters and grant charters, resolutions, guaranties, contracts, and council charters. CHaRLi does not include all text types. The table below presents a concise survey of the text types included in the subcorpus based on two periods: 1. Old Russian; 2. Middle Russian (Table 7):

**Table 7** The content of CHaRLi corpus (text types per period)

<b>Text name and period</b>		
<b>I. OLD RUSSIAN period (c. 1200-1401(3))</b>	<b>Origin (c.)</b>	<b>Genre</b>
The Questions of Kirik	12 <sup>th</sup>	canon law
Russian Livonian reports	12 <sup>th</sup>	enactment
Treaty of the Great Prince Alexander Nevsky and the Novgoroders with German ambassadors about common trade relations	12 <sup>th</sup> - 13 <sup>th</sup>	charter
Charters of Novgorod the Great and Pskov	13 <sup>th</sup>	charter
Treaties, collected by the archeographic expedition of the Imperial Academy of Sciences in the libraries and archives of the Russian Empire	13 <sup>th</sup> - 14 <sup>th</sup>	charter

Constitutional charter	14 <sup>th</sup>	charter
Collection of the state charters and treaties	14 <sup>th</sup>	charter
<b>II. MIDDLE RUSSIAN PERIOD (c. 1401(3)-1650)</b>	<b>Origin (c.)</b>	<b>Genre</b>
Judicial charter of Pskov	14 <sup>th</sup>	charter
Treaties, collected by the archeographic expedition of the Imperial Academy of Sciences in the libraries and archives of the Russian Empire	14 <sup>th</sup> - 15 <sup>th</sup>	charter
Code of laws of the Great Prince Ioann Vasilievich and Sudebnik of the Tsar Great Prince Ioann Vasilievich with additional decrees	15 <sup>th</sup>	code of law
Sudebnik of the Tsar Great Prince Ioann Vasilievich	15 <sup>th</sup>	code of law
Charters of Novgorod the Great and Pskov	15 <sup>th</sup>	charter
Negotiated charter (copy) of the Great Prince of Ryazan	15 <sup>th</sup>	charter
Negotiated charter	15 <sup>th</sup>	charter
Judicial charter of Novgorod	15 <sup>th</sup>	charter
Charters of Dvina	15 <sup>th</sup>	charter
Russian Livonian reports	15 <sup>th</sup> - 16 <sup>th</sup>	enactment
Judicial records	15 <sup>th</sup> - 16 <sup>th</sup>	enactments
Historical reports	15 <sup>th</sup> - 16 <sup>th</sup>	enactments
Lunar calendar	16 <sup>th</sup>	advice
Domostroj by Pope Silvester	16 <sup>th</sup>	advice
Treaties, belonging to the history of Western Russia	16 <sup>th</sup>	treaty

Constitutional charter	16 <sup>th</sup>	charter
Codes of law	16 <sup>th</sup>	code of law
Documents of diplomatic relationships between Muscovy and Crimea, Nogais and Turkey	16 <sup>th</sup>	charter
Reports of Muscovy	16 <sup>th</sup> - 17 <sup>th</sup>	enactments
Russian legislation	17 <sup>th</sup>	code of law
Stoglav. The Book of one hundred chapters	17 <sup>th</sup>	canon law
Treaty of the household of the boyar B. I. Morozov	17 <sup>th</sup>	treaty
Renouncement books	17 <sup>th</sup>	reports
Import charter	17 <sup>th</sup>	charter
The book about poverty and richness	18 <sup>th</sup>	treaty

This corpus might seem to be fairly small (with 3 million tokens), but the frequency and distribution of constructions with a nominative or an accusative in different text types and time periods (which were also verified in other secondary sources) show that it is large enough to draw valid conclusions on the behavioral features of both variants and possible language changes. Moreover, as corpus linguists in the last decades have pointed out, it is not just the size of a corpus that plays a role, but the quality of the corpus has a considerable impact on the performance of the statistical model. A corpus of high quality that has a small size and was created for a specific research inquiry can perform better than a corpus of poor quality that is larger by many orders of magnitude.

#### 4.2.2. Size of the corpus and period division

The following tables (8, 9, 10) list a representative collection of all the textual sources that were included in CHaRLi. With following selection of text samples, I tried to cover all major text

types representing chancellery language available from this subperiod. The corpus is divided into two major time periods (Old and Middle Russian), the Middle Russian period being divided into the Early Modern Russian Period and later Middle Russian Period. "H" = hybrid text; "ST" = statutory text".

**Table 8** The selection of text samples included in the Old Russian subsection of the CHaRLi.

<b>I. Period approx. 1200-1401(3) [7 documents; 76, texts. 29 374 tokens] + 11 Regions</b>						
#	Name of Source	Sort of text	No. of docs	Tokens	Clauses	Constructions
1	VK	H	1 text	4562	933	72
2	RLA (1189 - 1299)	ST	25 texts	4453	583	85
3	GSZR (1193 - 1301)	ST	11 texts	2027	112	48
4	SGGrD (1305 - 1362)	ST	10 texts	5130	792	87
5	GVNP (1264 - 1371)	ST	13 texts	6781	801	47
6	AARX (1294 - 1400)	ST	15 texts	5639	628	90
7	Ust.gr. (1389 - 1403)	ST	1 text	782	100	13
	<i>Total</i>	<i>ST</i>	<i>76</i>	<i>29374</i>	<i>3949</i>	<i>442</i>

**Table 9** The selection of text samples included in the early Middle Russian subsection of the CHaRLi.

<b>II. Period approx. 1401(3)-1601 [19 documents; 112 texts, 157 900 tokens] - 14 regions</b>						
#	Name of Source	Sort of text	No. of docs	Tokens	Clauses	Constructions
1	Sud. Kn. Vas. (1497)	H	1 text	3 923	369	89
2	Sud. St. (1497)	H	1 text	3 995	376	87
3	Lun.	H	1 text	493	81	20
4	Dom.	H	1 text	26 928	7 859	360
5	GVNP (1434 - 1471)	ST	5 texts	4 394	359	41
6	NSG (1471)	ST	1 text	2 115	248	58
9	PSG (1388)	ST	1 text	5 320	795	100
7	AARX (1404 - 1587)	ST	7 texts	5 225	691	135
8	RLA (1404 - 1588)	ST	33 texts	15 777	1 147	202
10	Dvin. gr. (1414 – 1432)	ST	6 texts	709	75	2

11	ASZR (1501)	ST	4 texts	1 358	153	20
13	Akty jur. (1479 - 1546)	ST	9 texts	8 622	775	159
14	Akty ist. (1484 - 1597)	ST	28 texts	13 322	454	81
15	AMG (1577 - 1601)	ST	5 texts	5 225	487	51
12	Stoglav	ST	1 text	53 326	5 235	116
16	PDSK (1516 - 1517)	ST	4 texts	1 026	137	12
17	Dog.gr. (1496)	ST	1 text	2 536	223	29
18	Dog. gr. (1531)	ST	2 texts	2 299	194	12
19	Žal. gr. (1549 - 1552)	ST	1 text	1 307	134	16
	<i>Total</i>		<i>111</i>	<i>157 900</i>	<i>19 792</i>	<i>1 590</i>

**Table 10** The selection of text samples included in the early Middle Russian subsection of the CHaRLi.

<b>III. Period approx. 1601(3) - 1800 [8 documents; 55 texts; 200 003 tokens (+ "VK" 105 914 tokens)] - 13 Regions</b>						
#	Name of Source	Sort of text	No. of docs	Tokens	Clauses	Constructions
1	Sob. Ul. (1649)	H	1 text	83 608	1 157	334
2	Pos. (1724)	H	1 text	67 327	8 822	573
3	Mor. (1652 - 1663)	H	33 texts	26 928	6 708	150
4	RLA (1603)	ST	1 text	145	6	1
5	Akty jur. (1600 - 1619)	ST	5 texts	482	21	56
6	AMG (1614 - 1632)	ST	1 text	10 241	875	34
7	OKB (1621 - 1645)	ST	7 texts	10 696	688	113
8	Vvoz. gr. (1603)	ST	6 texts	576	44	9
	<i>Total</i>		<i>53</i>	<i>200 003</i>	<i>18 321</i>	<i>1 270</i>
	<i>Publicistic</i>					
	Vesti K. (1656 - 1666)	publ	50	105 914	3 415	75
	<i>Total</i>		<i>55</i>	<i>433 826</i>	<i>23 370</i>	<i>1 558</i>

### 4.2.3. Description of some manuscripts and editions

Now I shall briefly characterize some texts that are not records, charters or contracts.

**Table 11** Description of some manuscripts and editions for CHaRLi.

VK (Voprošanie Kirikovo, ‘The Questions of Kirik’)	This Novgorodian document was written by the Novgorodian monk Kirik and probably by his bishop Nifont. (12 <sup>th</sup> c.). It contains questions about the rules and traditions of clerical life. There are two copies: one from the 16 <sup>th</sup> and one from the 13 <sup>th</sup> c. Eastern slavisms are widely represented in both copies. This text is classified, for example, by Živov (1996) as “hybrid church style”, whereas Nikolaeva (2012) suggested considering this text as a separate genre of the Old Russian church and business writing.
PSG (Pskovskaja Sudnaja Gramota, ‘Judicial charter of Pskov (14 <sup>th</sup> c.)’)	The Judicial charter of Pskov was a local judicial document. Despite its local character, it had the same authority as the <i>Russkaja Pravda</i> (Russian Justice). In a certain sense it has pan-Russian significance: the laws it had framed were reported to exist many centuries later in peasant communities in various Russian regions. It is preserved in two copies from the 16 <sup>th</sup> c. that are independent of each other. One is the Vorontkovsky copy, which includes the entire text of the charter. The other is the Synodical copy, which contains only the last twelve articles (according to the modern classification). The first copy was compiled in Vologda and on the White Sea, the second in Moscow. Unlike the Russian Justice, which concentrated on the judicial and sociopolitical problems of princely and boyar estates, the Judicial charter of Pskov provides an insight into the world of townsfolk and countryfolk and the socioeconomic development of a Russian town, as well as facts about Pskov in the 13 <sup>th</sup> – 15 <sup>th</sup> centuries.
NSG (Novgorodskaja Sudnaja Gramota, ‘Judicial charter of Novgorod’ (15 <sup>th</sup> c.))	The Judicial charter of Novgorod was written before 1471. The text of the charter appeared around 1385 and was edited many times afterwards. The surviving part of the Judicial charter comprises articles on judicial organization and judicial procedure in some cases, on land litigation. Among other issues it stipulates the competencies of the Moscow Prince in the solution of Novgorod’s



	affairs. The Russian Justice was the source of the Judicial charter of Novgorod.
Sud.St.1497 (Sudebnik 1497 goda, 'The Law Code of 1497')	The law code was compiled by the Grand Prince of all Rus' Ivan Vasilievich, with his children and boyars. In terms of composition, the content of the Law Code is divided into three parts: 1) judgements of the central court (articles 1 – 36); 2) judgements of local courts (articles 37 – 45); 3) judgements on substantive, civil and criminal law (articles 46 – 66). Sometimes the two concluding chapters (67 and 58) are distinguished because they may be characterized as addenda: on the prohibition of giving promises to judges and on the rules of trial by combat.
Sud. 1550 (Zakony velikago Knjazja Ioanna Vasiljeviča i Sudebnik Carja i Velikago Knjazja Ioanna Vasilieviča s dopolnitel'nymi ukazami, 'Laws of the Great Knyaz Ioann Vasilievich and Sudebnik of the tsar Great Knyaz Ioann Vasilievich with additional decrees')	This is the law code compiled by Ivan the Terrible (Ivan IV) and his boyars. In June 1550, its text was adopted with the participation of the Boyar Duma. The structure of the text closely follows that of the 1497 Code. Tendencies to further centralization of administration and judicial procedure in the state, which had already been outlined by the Law Code of 1497, were developed in the articles of the new Sudebnik of 1550. The original of the Sudebnik of 1550 was lost; however, there are 40 known copies of the Law Code, including 13 made in the 16 <sup>th</sup> c.
Stoglav. (Stoglav, 'The Hundred Charter Synod')	The Stoglav is the document containing the decisions of the Council of 1551, which regulated canon law and ecclesiastical life. Four editions of this text were published.
Mor. (Akty chozjajstva bojarina B.I. Morozova, 'Treaty of the household of the boyar B. I. Morozov')	This is a collection of documents, mostly containing instructions sent by the boyar B. Morozov from Moscow to his various estates, but also different kinds of documents sent to him by his estate managers, as well as correspondence with the headmen and other officials. ChaRLi includes the second part published in 1945 (Yakovlev). It was not included in Dunn's study. Instead, he tested just the first part published in 1940. The first part was not available for the present investigation (it is in the state library in Moscow). However, the results of my distributional analysis are based on Dunn's (1978) and my own research.
Pos. (Kniga o skudosti i bogatstve, ed. I.T. Posoškov, 'The book about	This is one of the main œuvres by Pososhkov written during the reign of Peter the Great and considered one of the first books on economic problems. The book features many proposals and

poverty and wealth written by I.T. Pososhkov')	projects concerning various spheres of state and social life. According to the author, the purpose of this book was to show the causes of the "vain deficiency of the state" and the growth of wealth.
Lun. (Lunnik, 'Lunar calendar')	This is a small collection of interesting hygienic precepts among other notes, which were found in a manuscript collection of the former library of Novgorod Sofia Cathedral from the 16 <sup>th</sup> c.

#### 4.2.4. Annotation

The design of the subcorpus and the annotation were based on a theoretical framework justified by the specific research goals of this thesis and of the diachronic project "Corpus Linguistics and Diachronic Syntax: Subject Case, Finiteness and Agreement in Slavonic Languages". A combination of automatic and manual annotation steps, the annotation scheme implemented by the research group for representing the syntactic constructions and their annotation was intended to answer any of the research requirements and could coexist with all the other requirements. The using of common format allows us to have already annotated categories which might be easily merged and manipulate without extra work<sup>63</sup>. The annotation process was adopted in the annotation for the RRuDI corpus (cf. Meyer 2012a). Morphological tree-tagging could be performed automatically and within the design of RRuDi<sup>64</sup> (Meyer 2012a: 44-46). The tree tagging was a combination of the Old Church Slavonic tagger and a tagger for modern Russian (designed by Helmut Schmidt). Clauses and specific constructional types were then annotated manually.<sup>65</sup> For the automatic tagging, a tagger was used that was created by Roland Meyer and annotated each document for various categories as a separate file in GATE (<http://gate.ac.uk/>) following the principles of the design of RRuDi (Meyer 2012a). For the present investigation, it was important to construct a flexible subset of multilevel annotation capable of combining the morphological and syntactic features that constitute the nominative object constructions and/or their related syntactic constraints (see the "list of factors" below). Then, or parallel to this annotation, specific phenomena (different construction types) were also

<sup>63</sup> See also Meyer (2003, 2009, 2012).

<sup>64</sup> See Meyer (2007).

<sup>65</sup> I am most thankful to Aleksei Tikhonov and Olesya Lazarenko who did the manual clause annotation in different texts.

manually annotated in the GATE annotation program, with an eye to maintaining representativeness in these smaller portions as well as ensuring that a common component includes as many annotations of different types as possible. For this reason, I applied (semi-)automatic annotation techniques by using a list with frequent lexemes and selecting the specific construction types and their elements for a drop-down list. Of course, the annotation software can later be improved upon to provide more accurate annotations that are produced automatically so that it could possibly be used for a much larger body of data.

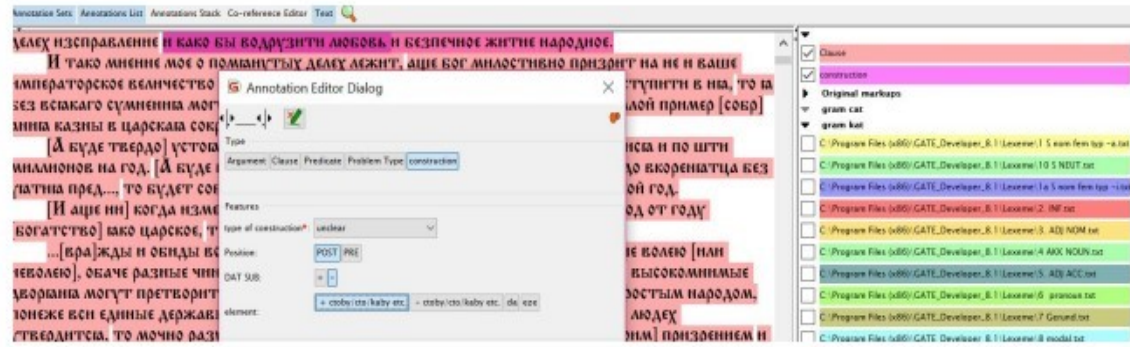
#### 4.2.5. List of relevant factors investigated

The main effort was directed to the assignment of infinitival constructions with a nominative or an accusative object observing the components of the construction, and, on the other hand, to identifying extralinguistic factors that can be tested as potential factors influencing the variation in the case-assignment strategy (cf. Chapter 3), such as the variables listed in the following table (12):

**Table 12** Variables with a possible effect on the choice of construction.

<b>Morphosyntactic factors:</b>	<b>Options</b>
logical dative subject	yes [+] or no [-]
type of predicate	independent infinitive or dependent infinitive
type of argument	F. SG. – <i>a</i>  animate
word order of elements	preverbal or postverbal
<b>Nonlinguistic factors (external)</b>	
text category	chancellery texts or nonchancellery texts
time	Old Russian Middle Russian
localization	Northern Russian

The following picture (Figure 5) shows the working version of the drop-down annotation list used:



**Figure 5** Illustration of the drop-down annotation list for the ChaRLi (within GATE-Annotation tool)

Figure 6 summarizes the data sample for the NPICs and APICs in Old Russian and Middle Russian after its extraction from CHaRLi:

Name of document	Year	Period	Period ID	GENRE	Genre ID	Type of text	Type of text ID	GEO	GEO ID	Context	Annot	CT	DAT	DS1	DS2	Conj	Position NP
Sud. 1497	1497	14 - 16	2	hybrid	2	code of law	4	Moskva	10	А доводчику имати хоженое и езд и правда по грамоте.	NPIC	1	1	1	1	1	0
Dvin. gr. (17)	1515	14 - 16	2	statutory	1	acts	1	Dvina	3	а-ичицивати-та-земл-а-оуласью.	NPIC	1	1	1	1	1	0
AARX (12)	1294 - 1401	12 - 14	1	statutory	1	acts	1	Nižnij Novgorod	11	и архимариту Ionъ съ братьею въ тѣхъ водахъ рыба ловити	NPIC	1	1	1	1	1	1
SGGrD	1389	12 - 14	1	statutory	1	charter	2	Novgorod	12	а тѣмъ знати своя служба,	NPIC	1	1	1	1	1	0

**Figure 6** Illustration of the data-set entries for NPICs and APICs from CHaRLi for Old and Middle Russian.

The variables in the Figure 6: NPIC = 1, APIC = 0; for a preverbal nominative or accusative NP: PRE = 1, for a postverbal one: POST = 0; if a logical dative subject is present in the construction, it is marked with 1 and if absent with 0 (DatS + = 1; DatS – = 0; the position of the dative subject with respect to the NPnom/acc (DS1) and with respect to the infinitive (DS2) was marked as PRE = 1 and POST = 0. If conjunctions are present, they are marked as Conj(no) = 0, Conj(yes) = 1.

#### 4.2.6. Types of construction

As one of the central theoretical issues of the present investigation is to discuss the status of the nominative patient argument, the working hypothesis is: non-accusative objects do not consistently behave like accusative objects with respect to parametric properties and can be interpreted as subject-like elements. To compare phrase structure variation, I examined the

occurrence of the nominative and the accusative + independent infinitive, that is, NPiCs and the APiCs (cf. Chapter 2.1.3). Starting out from Timberlake's five different constructional types, which realized the "nominative object rule" in Old Russian (see Chapter 3), I modified this list in order to be independent of the theoretical framework and first distinguished two major structural groups of infinitive constructions and their subgroups that I call "Primary infinitive Constructions" (PiCs) including the nominative + infinitive (NPiC) and the accusative + infinitive (APiC) and the "Secondary infinitive Constructions" (SeCs), which share some structural and semantic properties with the PiCs, but occur, for example, with a dependent infinitive governed by another matrix element (for details and examples as well as subtypes, see Chapter 2.1.3). The annotation marked five different features for which I, at the time of the annotation, still used some traditional terms that I later decided to replace by the ones introduced in Chapter 2.1.3 for more accuracy:

**The types of construction were annotated as follows:**

1) the NPiCs and APiCs = "NcI" or "AcI" constructions; 2) the NSeCs-1 und NSeCs-2, and the ASeCs-1 and ASeCs-2 (with a dependent infinitive = "NdepI" or "AdepI"); 3) the NSeCs-2 and ASeCs-2 with a finite verb = "NfinV" or "AfinV". Although all these types refer to a construction including a feminine noun, types 4 and 5 refer to a construction with a syncretic nominative–accusative form in masc. sg. annotated as follows: 4) the N/APiCs with a noun in the masculine or neuter in singular = "Acc or Nom(m/n,sg)indInf"; if it appears in the plural = "Acc or Nom(m/n,pl)indInf"; 5) the N/ASeC-2 a noun in the masculine or neuter in singular = "Acc or Nom(m/n,sg)depInf", or, in plural = "Acc or Nom(m/n,pl)depInf").

Abbreviations: Nom = nominative, Acc = accusative, f = feminine, m = masculine, n = neuter, sg = singular, pl = plural; indI or indInf = independent infinitive; depInf or indI = dependent infinitive of a matrix verb, a modal verb, another infinitive or a past passive participle; finV = finite verb.

For the discussion of the results of the corpus-linguistic investigation, I will not use any of the various names for the constructions that are found in the previous literature, but coherently stay with the (abbreviated) names introduced in Chapter 2.1.3.

As the NPiCs or APiCs presumably have often been used with a conjunction, the absence ("–") or the presence ("+") of the conjunction was marked as follows: "*čtoby/čto/kaby*, etc." The

presence of the logical dative subject in the construction was marked as [-/+]<sup>1</sup> DAT (dative). The post-verbal or pre-verbal position of the NP in the nominative or accusative is annotated as POST/PRE. The full description to the annotation can be found under: [www.laudatio-repository.org](http://www.laudatio-repository.org).

### 4.3. Metadata

The text sequences for CHaRLi came in two formats: as separate text files and as single XML files. The XML documents include a TEI header, which gives relevant information on the XML file itself, its annotators, and bibliographical information about the edition used. The individual text headers give bibliographic and descriptive metadata. The metadata convey information about the source, that is, prototypical *text categories*, *text type*, *region*, *date*, and *author*. With this range of factors annotated independently from each other and receiving their own ID number it was possible to query the corpus across multiple levels and thus investigate possible interactions between linguistic and nonlinguistic features or their combinations (Table 13):

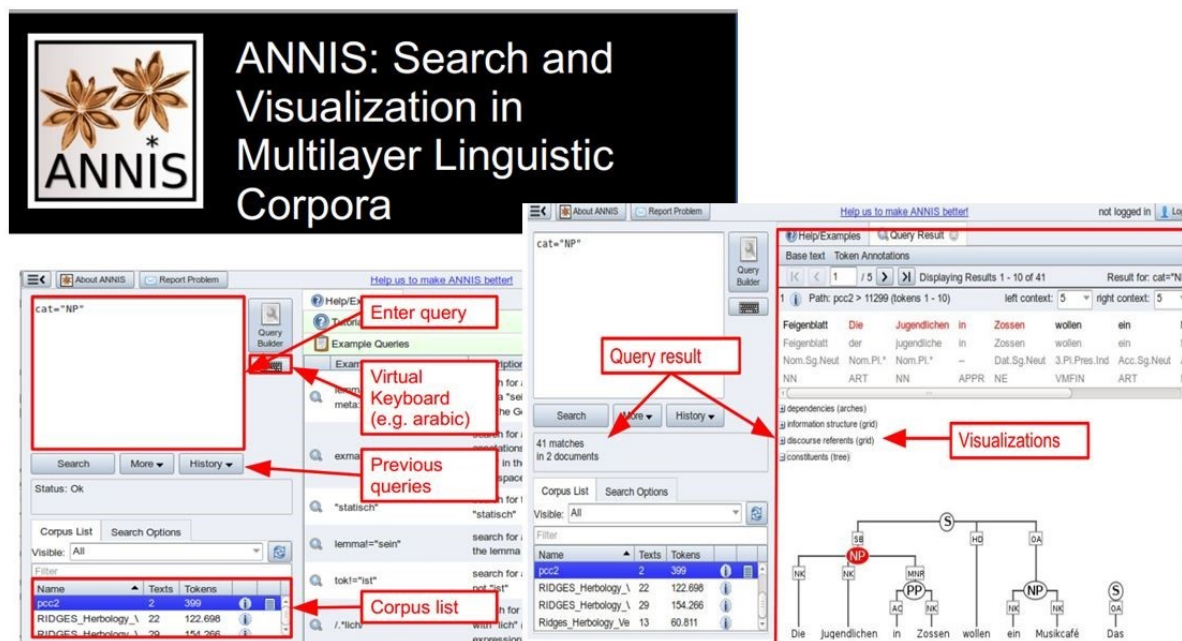
**Table 13** Illustration of the metadata information after extracting from CHaRLi

GEO	GEO ID	GEO	GEO ID	Text category	Genre ID	Period	Period ID	Type of text	TT ID
Belgorod	1	Pskov	16	statutory	1	12 <sup>th</sup> - 14 <sup>th</sup> c.	1	reports, writs	1
Bryansk	2	Riga	17	hybrid	2	14 <sup>th</sup> - 16 <sup>th</sup> c.	2	charter	2
Dvina	3	Rylsk	18	publicity	3	16 <sup>th</sup> - 17 <sup>th</sup> c.	2	canon law	3

Abbreviations: GEO = location or name of the city where the document was composed; otherwise “unknown”. Annotation entries and description: each city received an ID number to simplify analysis and to make it possible to also compare the results of these datasets according to the nonlinguistic factors such as the region.

#### 4.4. Visualisation

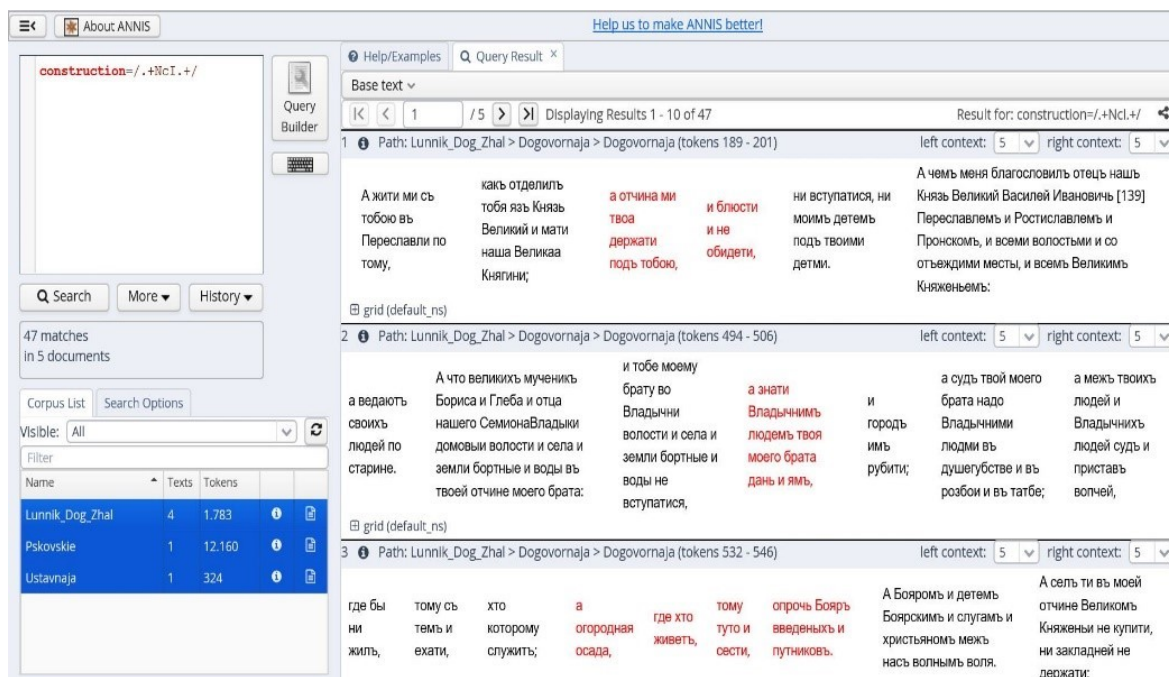
After the primary data had been annotated, they were converted to ANNIS (Figure 7), which is a linguistic database including diverse corpus data sources that permits searching in these corpora with a multivariate annotation.<sup>66</sup>



**Figure 7** Corpus data visualization with ANNIS (Original source: <https://corpus-tools.org/annis/>)

Figure 8 demonstrates the corpus hits as a grid visualization of annotations of the data-set entries for the NPICs and the APICs of CHaRLi for Old Russian and Middle Russian:

<sup>66</sup> For more details see: (Druskat & Vertan (2017) and <http://corpus-tools.org/home/>)



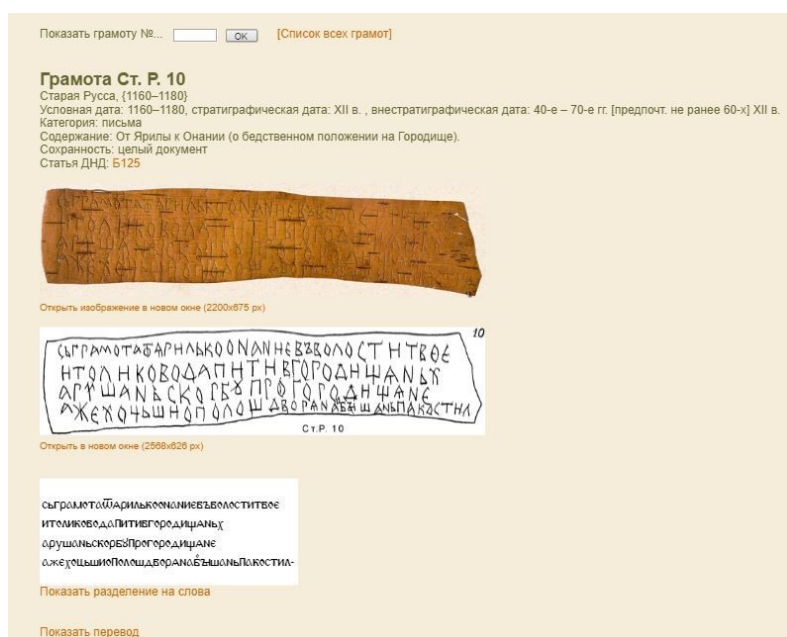
**Figure 8** Search results with an annotation grid in ANNIS (Original source: <https://corpus-tools.org/annis/>).

#### 4.5. Secondary sources

Other available historical sources or databases, linguistic corpora for Russian and paper manuscripts (especially for the Old Russian period) were used especially for complementing the data for the qualitative analysis and for verifying the assumptions made previously based on the corpus analysis. A brief description of these sources is presented below.

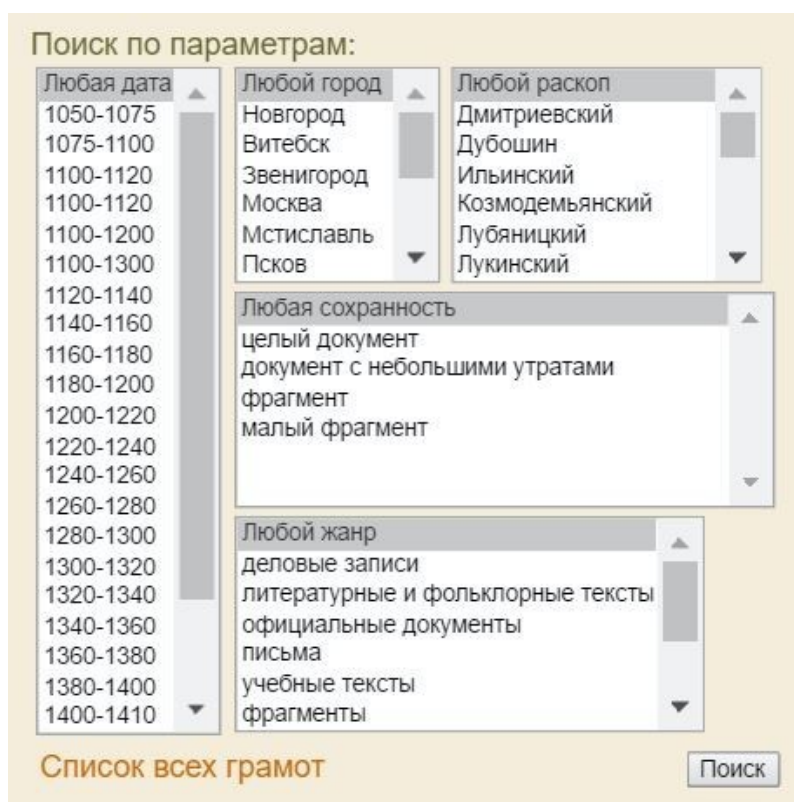
1. The examined data were extracted from the corpus of the birch bark documents/letters (Rus.: *berestjanye gramoty*) available on-line at <http://gramoty.ru/>), which is a part of the diachronic subcorpus of the Russian National Corpus (<http://ruscorpora.ru/search-birchbark.html>). This corpus includes more than 800 documents with detailed metadata about the source. On the webpage, there are also images of the original birch bark documents (Figure 9), often with a translation and a text segmentation.





**Figure 9** Novgorod birch bark charter No. 10 (1160 - 1180) (Original source: [www.gramoty.ru](http://www.gramoty.ru)).

Users can select a subcorpus by choosing the genre, the location, and the range of years of the texts (Figure 10).



**Figure 10** Search options in the birch bark data base (Original source: [www.gramoty.ru](http://www.gramoty.ru)).

2. There are four different historical subcorpora of the Russian National corpus for different time periods (for a detailed description, see Mitrenina 2014). For the present study, three of them were used: for Old Russian, for Middle Russian and the birch bark subcorpus available at: <http://www.ruscorpora.ru> )

a) The Old Russian part (Rus.: *drevnerusskij*) includes 17 texts, with more than 430 000 tokens, which are morphosyntactically annotated. It is also possible to choose specific documents and see the query result (Figure 11) in their Greek originals and their location in the original text.

Древнерусский корпус о корпусе

Орфография: ☐ точная ☒ упрощенная ☐ модернизированная

Поиск точных форм ? A B B

Слово или фраза

Лексико-грамматический поиск ?

Слово ? <span style="border: 1px solid black; padding: 0 2px;">A B B</span>	Грамм. признаки ? <a href="#">выбрать</a>	Семант. признаки ? <a href="#">выбрать</a>
Доп. признаки ? <a href="#">выбрать</a>		
Расстояние: от 1 до 1 ?		
Слово ? <span style="border: 1px solid black; padding: 0 2px;">A B B</span>	Грамм. признаки ? <a href="#">выбрать</a>	Семант. признаки ? <a href="#">выбрать</a>
Доп. признаки ? <a href="#">выбрать</a>		

**Figure 11** The search engine for the Old Russian subcorpus (Original source: [http://www.ruscorpora.ru/old/search-old\\_rus.html](http://www.ruscorpora.ru/old/search-old_rus.html))

b) The Middle Russian corpus (Rus.: *starorusskij*) includes texts from the 14<sup>th</sup> c. to the beginning of the 18<sup>th</sup> c. It comprises more than 1900 documents and more than 3 million words. The names of the documents are not visible, but it is possible to select a subcorpus by choosing the genre of a text, the authors, the date range, and the language style (common, official, etc.). The following picture shows the search engine of the subcorpus for Middle Russian (Figure 12):

Старорусский корпус

Поиск точных форм ? A B B

Слово или фраза

Национальный корпус русского языка  
© 2003–2017

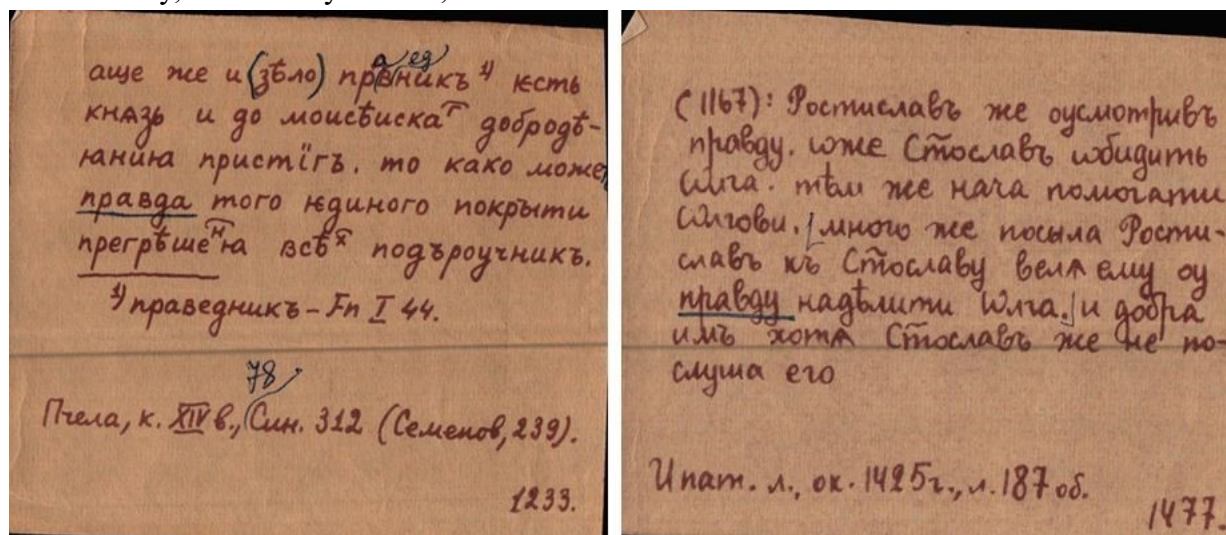
**Figure 12** The search engine for the Middle Russian subcorpus (Original source: [http://www.ruscorpora.ru/old/search-mid\\_rus.html](http://www.ruscorpora.ru/old/search-mid_rus.html)).

Although this subcorpus includes various texts from the period, it is only possible to search for exact word forms, not for morphological categories or other features. In the future, the search function might also become available for morphological categories; however, for the present investigation, only exact forms could be searched for in this subcorpus. Moreover, examples of the constructions show patterns that appear to be productive but are mere repetitions in the datasets that need to be cleared out manually after the extraction of the all the occurrences. These facts have so far made it impossible to analyze the actual distribution of the constructions. However, I also used this source to check some exact forms and their use. The next page shows them in the extracted form evaluated in an excel datasheet (Figure 13):

не бил челом; а как	служба	сказана, и он учал о	Разрядная книга 1475–1598 гг. Разряды 1512–1598 гг. (1512-15
} государева	служба	сказана, и у скаски били	Разрядная книга 1475–1598 гг. Разряды 1512–1598 гг. (1512-15
поместья сыну ее Федору наша	служба	служити.	Жалованная грамота, ввозная и несудимая, п. Филарета вдов
им с того поместья наша	служба	служити.	Жалованная грамота, ввозная и несудимая, п. Филарета свои
Максимку с того поместья наша	служба	служити.	Дело по челобитью вдовы с. б. П. Серкова Марьи с сыном о по
Максимку с того поместья наша	служба	служити.	Дело по челобитью вдовы с. б. П. Серкова Марьи с сыном о по
Семену с того поместья наша	служба	служити.	Дело по челобитью сына боярского Ф. И. Соболева о пожалов
б с того поместья государева	служба	служити.	Дело по челобитью вдовы И. Я. Чертова Анастасии с сыном и,
б с того поместья государева	служба	служити.	Дело по челобитью вдовы С. Скобельцына Ирины с сыном о п
князя Бориса Федоровича всеа Руси	служба	служити.	Запись о пожаловании п. Иовом своего с. б. К. Ш. Матова пом
ему с того поместья государева	служба	служити.	Дело по челобитью с. б. В. Т. Потапова о пожаловании его пом
Василью с того поместья государева	служба	служити.	Дело по челобитью с. б. В. Т. Потапова о пожаловании его пом
князя Бориса Федоровича всеа Руси	служба	служити.	Запись о пожаловании п. Иовом своих д. б. Б. Б. и Г. Б. Рагози
б с того поместья наша	служба	служити.	Дело по челобитьям К. А. Сурмина и вдовы И. Сурмина Марии
Давиду с того поместья государева	служба	служити.	Дело по челобитью д. б. И. Ф. и Д. Ф. Соболевых о пожалован

Figure 13 Results extracted from ruscorpora (date: 01.10.2016).

3. Some material was also found in the Rus.: *Kartoteka Slovarja drevnerusskogo jazyka* at the Russian Academy of Sciences (XI-XVI I vv. - KSDR, Moskow) (Figure 14 here) during a research stay, financed by DAAD, in Nov. 2015.<sup>67</sup>



<sup>67</sup> I made two visits to Moscow, during this visit. I had the opportunity to work in the archives and libraries, such as the Dissertation Archive and the Russian State Library and the Library at the Russian Academy of Sciences. The work in the KSDR was very helpful. I am very grateful to Professor Vadim Kryś'ko, who gave

**Figure 14** Scans from the Kartoteka Slovarja drevnerusskogo jazyka at the Russian Academy of Sciences (own collection).

#### 4.6. General means of corpus analysis

As already discussed in Chapter 3 of this study, the status of the NPiC and its use in the Old and Middle Russian periods have received considerable attention in previous studies. However, for methodological reasons, a new perspective on the presentation of the usage and development of this infinitival construction in comparison with its variant marked by the accusative (APiC) is necessary. Firstly, previous studies mostly limited their attention to a qualitative description of NPiCs; the distribution and use of APiCs was only partially represented in some of the studies (e.g., Dunn 1978). Secondly, the secondary constructions with a nominative and an accusative (SeCs) and their interaction with the PiCs were not analyzed at all. Thirdly, insofar as quantitative data were used at all, the studies were limited to using raw frequencies and mere distribution percentages for the two variants in individual texts (as, e.g., in Dunn 1978, 1982, Ron'ko & Zimmerling 2015). Especially in the last decades, there has been an increasing interest in approaching and interpreting language variation and language change processes by using corpus data. Historical linguistics can, however, also take advantage of the quantitative methods of corpus-based/corpus-oriented techniques. With my study, I wanted to combine the insights already gained in previous studies with the most recent statistical methods of corpus linguistics and thereby to try to close some of the knowledge gaps that still exist.

The aim of this chapter is to present the results of my quantitative and qualitative analysis based on the data from CHaRLi. The purpose of the analysis was to provide possible answers about macro- and micro-changes in the case variation found in infinitival constructions with noncanonical nominative versus canonical accusative object marking and to discover trends in the usage of different constructional variants across both the corpus periods and the varieties of the chancellery texts in the history of Russian.

The corpus analysis proceeded in several subsequent steps. Accordingly, the structure of this chapter corresponds to the logic of the analysis. The steps and the results of the quantitative analysis of the corpus data are presented in Sections 5.2. to 5.6. The results of the quantitative

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me many valuable suggestions for literature, facilitated my participation in his seminar, and answered many of my questions.

analysis helped to perform the qualitative analysis of the data that is described in Section 5.7. Here, the semantic and functional shifts accompanying the development of the nominative object constructions and the interactions of different factors during different time periods are also described in more detail. Section 5.9. provides a summary and general assessment of the results of this corpus analysis. Additional information for specific texts is found in the Appendix.

The combination of quantitative and qualitative results helps to increase the accuracy of the study of historical material even when faced with both a lack of available sources, especially for early periods, and with the vast variability in the diachronic data itself. Moreover, the data and the new methods of corpus linguistics help to identify the temporal stages in which changes (micro-changes) in the use of one or other constructional variant took place, as well as the factors that are correlated with these changes and even possibly drove them.

The first step of my analysis was a rough descriptive examination, in order to paint the “big picture”, to summarize the data, and to discover patterns in the use of PiCs and SeCs in a meaningful way for further analysis. The observable phenomena have been rephrased in terms of the frequency of their use; this involves considerations of relative frequencies and a comparison of usage in Old and Middle Russian. The first step was to examine the distribution and to determine the relative frequency of PiCs and SeCs with canonical and noncanonical object marking with respect to different text categories and across the centuries of Old (to a lesser degree) and Middle Russian texts. Next, it was important to find out which variants competed, before trying to explain the shifts in their development. The second step was to visualize the temporal profile of the development lines of competing variants.

Based on the previous results of descriptive analysis, which provided the frequencies of the phenomena in a way fit for comparison, a stepwise logistic regression analysis (inferential statistics) was applied according to the current standard in corpus linguistics, that is, the  $\chi^2$  test, Cramer’s test, Fischer’s test, lrm (logistic regression modeling), and ANOVA (ANalysis Of VAriance)<sup>68</sup>. Each of these steps represents a well-known technique in the statistical evaluation of the diachronic linguistic data (they are popular in studies for English or German but have still not truly been exploited for Eastern Slavic Studies). All of them are discussed in detail in

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<sup>68</sup>The purpose and advantages of each test will be presented in the corresponding sections of this chapter.

Baayen (2008) and Hilpert & Gries (2016). These statistical tests were used to evaluate whether there was any significant deviation between the datasets and to help to establish reasonable statistical models of the development of a specific linguistic phenomenon. Moreover, they helped to more precisely evaluate the predictive power of these models and the significance of the different structural and nonstructural conditioning factors on the choice of the construction (NPiC or APiC). The main questions of these analyses were: can the variation in object case licensing be explained as purely random case variation or was it a rule-derived mechanism in different time periods? What drives the choice of constructional variant? And how can it be described statistically? The special focus in these questions has been on the gradual development in the features of the competing variants, which could become categorical at a certain language stage.

According to the objectives of my corpus investigation, the results of my statistical analysis are based on random sample modeling, which assumes the representation of randomly selected data observed for the language of interest. In the case of this study, these are texts from the Old and Middle Russian period that have been thoroughly discussed in previous secondary literature on this phenomenon. These texts constitute the canon for the purposes of my investigation.

As shown in Chapter 3, previous studies have suggested several possibly conditioning factors (“variables” in my terminology) that are structural as well as nonstructural (also called intra- and extralinguistic factors). They were conjectured to correlate with the occurrences of noncanonical nominative case marking for the object. To analyzing their effects on the choice of construction (NPiC vs. APiC) and their interplay with other factors, the dataset from CHaRLi was extracted where the two constructional variants have been attested in the same texts and historical periods. Since the main interest of this study is to analyze the variation in the case marking of the object NP in specific syntactic constructions and to extract and compare the normalized frequencies of each construction type, it was assumed that each annotation category or combination of different categories is a variable, and diverse surface forms or lower levels of annotation represent the variants of a variable.

The aim of the analysis was first to find, by combining multivariate statistics and feature analysis, a model that considers different factors, but also eliminates insignificant factors. Furthermore, as the corpus data were divided in two datasets according to the time periods (I. Old and II. Middle Russian), another aspect was to detect the interaction of time with each of these conditioning factors. I considered the linear mixed effects model (LMM), which was

proposed in Baayen (2008) and exemplified in case studies for English in Gries & Hilpert (2010), among others. These regression models test whether the above factors are indeed correlated with the use of noncanonical nominative object marking. We can also see whether predictive power is lost or gained when different factors are combined, and how influences changed over time.

At the same time, I shall comment on some limitations of the empirical research presented in this book now. Firstly, as in all diachronic corpus-based studies, my study was limited in the available data sources that I could use for the corpus design (especially for the earliest periods) and in their geographical distribution. Secondly, I only considered texts that frequently used both or at least one of the constructions, whereas I disregarded texts that used these variants only occasionally (i.e., less than 3 times) as well as those in which the use of two variants was limited to specific “idiomatic expressions” (especially from the end of the Middle Russian period). Thirdly, analysis of the nonlinguistic factors, such as the geographical limitations, was difficult because of the lack of a comparable amount of text from different regions of the Old and Middle Russian period (which, however, might be possible in future research). Nonetheless, especially regarding these limitations, the approach presented here can help to increase the accuracy of such results. Moreover, NPICs are a highly complex phenomenon and therefore need specific statistical tools for a multifactorial corpus-based analysis, which then help to test the debatable intuitions of different assumptions in previous studies on this topic. Equally, these tools can assist in the creation of an adequate model for this specific phenomenon and assess the quality of the fit of the statistical model.

## 5. Results of Corpus Analysis

### 5.1. Distributional analysis

In historical linguistics and in typological studies, distributional and inferential statistical analysis can be very useful to shed new light on changes in macro- and microlinguistic processes by allowing different trends in usage to be observed and evaluated. The fundamental assumption of a distributional analysis is that the meaning of a construction can be determined based on the co-occurrence of patterns in a linguistic corpus (which may be lexical, syntactic, and/ or morphological).

The frequent use of nominative object constructions in legal and administrative texts representing the chancellery language in the Old and Middle Russian period does not mean that the construction was restricted to this kind of text. As exemplified in Chapter 2, different types of nominative object construction have also been found in chronicles, in religious texts, folklore texts, even in literary texts in the later Middle Russian period, and very often in hybrid texts. So, the assumption made by some scholars that the use of the construction was limited to the texts closest to vernacular (spoken) language, referring to the treaties and birch bark documents, and therefore that, in literary texts, only accusative object constructions were used, has not been confirmed by the empirical evidence given above. Both nominative and accusative object constructions were represented, although to a different degree, in both kinds of text that contain nominative object constructions. A more plausible explanation of the distribution of the constructions is based on the following two factors:

- 1) the modal semantics (and their differences) and,
- 2) the specific pragmatic profile (and purpose) of such texts when they represent chancellery language.

As in other languages, Russian infinitive sentences were originally polyfunctional and gradually developed different patterns expressing either modal or nonmodal meanings, until finally (probably in the 14<sup>th</sup> c.) the infinitive itself was reanalyzed and began to be assigned new functions (according to Timofeev 1959, Fomin 2003, etc.). In the Old Russian period, the diverse types of infinitive clause differed according to their communicative context. Six to ten different types of such infinitival sentences have been identified. Fomin (2003), for example,



after examining texts dating from the 11<sup>th</sup> to the 14<sup>th</sup> c., concluded that there were six types that differ in their specific modal meaning (Fomin 2003: 200-201). The present thesis will not deal with all these types of infinitive clause and their origin in the history of Russian. Throughout history though, diverse syntactic and semantic changes have occurred in infinitival constructions leading to different patterns, some of which were replaced or disappeared from the language. The rise of modality and modals also had an influence on these processes. However, some of the patterns, like the nominative object construction, have been preserved throughout the history of Russian, possibly because of their complex nature. The fact that infinitive modal sentences were used in chancellery language with especially high frequency could have been an important factor in this. In such texts, more than 80% of the constructions were infinitive sentences including the nominative object constructions (cf. Borkovskij 1949: 80-82) that were used to express the modal meaning of “necessity” or to express an order or obligation.

The earliest occurrences of nominative object constructions in the written language have been found in early Old Russian sources dating from the 12<sup>th</sup> c. For the most part, they occur in texts and documents written in the North Russian area (Novgorod, Pskov), such as VK) dated 1130 – 1156 (see below in (75)), the Birch bark documents (Ber. gr.; already mentioned before, which contain official and personal messages as well as business and private letters and are dated to the second half of the 12<sup>th</sup> c., and in Russkaja Pravda (RP; in (76)), which is embedded in the First Novgorod Chronicle. The roots of the PiCs therefore date back to at least the 12<sup>th</sup> c. (cf. Zaliznjak 2003, Timberlake 2015).

(75) VK, 1130-1156:

*A krestiti na bljude razve sočiva, goroch, bob, sočevica...  
vsja:*

and to-baptize- on plate besides beans all peas, beans lentil-  
INF NOM.F.SG

‘It is necessary to bless indeed all beans: peas, haricot beans, and lentils on the plate’

(76) RP, Troick. spisok, second half of the 14<sup>th</sup> c.

*A platiti emu grivna za muku*

and    to-pay - INF                    he - DAT            grivna - NOM.F.SG            for flour

‘And it is for him to pay a grivna for the flour’

From the end of the 14<sup>th</sup> and until the end of the 17<sup>th</sup> c., nominative object constructions were regularly used in administrative and other texts representing the chancellery language, but also in private correspondence or instructions, as well as in legal texts and trade documents. They also repeatedly occur in quasi-clerical texts such as *Žitie by the Protopope Avvakum* (17<sup>th</sup> c.) and *Inoe skazanie* (1620; cf. Lomtev 1949: 14). The generally frequent use of the construction could be explained by the fact that, in official texts, more than 80 percent of all sentences were infinitival sentences (Borkovskij 1949). From a pragmatic point of view, they aimed to establish contact (contact function) and establish obligations and rules regulating relationships within the community (obligational function). For instance, they could contain an order, or explain and decree duties of certain individuals or groups in a compact form. Diverse infinitive sentences in this period were polyfunctional with respect to their modal or nonmodal meaning and their pragmatic functions, as in the following examples: (77) expresses the modal semantics of a “deontic necessity to do something”, whereas (78) expresses the modal semantics of the “possibility to do something”:

(77) Dog. gr. 1496, Rjazan':

<i>a</i>	<i>otčina</i>	<i>mi</i>	<i>tvoa</i>	<i>deržati</i>	<i>podъ</i>	<i>toboyu</i>	
and	land-	I - DAT	your-	to-keep- INF	under	you	-
	NOM.F.SG		NOM.F.SG			INS	

‘And it is for me to keep your land’

(78) Vvoz. gr., 1603:

<i>a</i>	<i>[Ivanu Oničkovu]</i>	<i>s</i>	<i>togo</i>	<i>pomest'ja</i>	<i>gosudareva</i>
and	Ivan Oničkov - DAT	from	this	land	state - NOM.F.SG
<i>služba</i>	<i>služit'</i>	<i>mošno</i>			
service-NOM.F.SG	to-serve INF	possible - MOD			

‘And it is possible for Ivan Oničkov from that land to perform a state service’

Infinitive sentences of the same, or a nearly parallel, kind have been attested to in Old Ukrainian sources, as in the following example (79), in which a nominative is used with an infinitive

dependent of a finite verb, and in Old Belarusian sources, as in (80) and (81). This shows that, in the later period, the use of the nominative construction was not restricted to the Northern Russian dialectal area:

(79) from Ust. tam. gr., N.41,1407, cited by Dunn (1978: 273):

<i>A</i>	<i>na</i>	<i>krěpost'</i>	<i>togo</i>	<i>naša</i>	<i>pečat'</i>
and	for	enhancing	this	our - NOM.F.SG	seal - NOM.F.SG
<i>k</i>		<i>semu</i>	<i>listu</i>	<i>velěli</i>	<i>esmi privěsiti</i>
to	this		list	order -	affix - PRS
				PAST.3.PL	

'In order to enhance this, it is necessary to affix our seal to this list'

(80) both examples from PR, 1503 in Potebnja (1958: 405):

<i>cholopu</i>	<i>i</i>	<i>robe</i>	<i>very ne jati,</i>	<i>a</i>	<i>obadě</i>
serf -		and housemaid DAT.F.SG	trust does not		just
DAT.M.SG			have, but		
<i>isprava</i>		<i>dati</i>			
vow -NOM.F.SG		to-give - INF			

'One should not believe the word of serf and housmaid and both should make the vow'

(81) *Vitblyaninu* *vsja* *tat'ba* *vernuti*  
 man from Vitebsk all burglary - NOM.F.SG to-return - INF  
 'It is necessary for the man from Vitebsk to return all burglary the stolen goods'

As mentioned earlier, in the Middle Russian period (the period from approximately the 15<sup>th</sup> to the end of the 17<sup>th</sup> c.), the nominative object constructions, especially the SeCs, were regularly used in official and legal texts (treaties, official and private letters, and trade documents, etc.). These texts represent the chancellery language and originated in the Central and North Russian areas, or, in many cases, even directly in Moscow, for example, Sudebnik 1497, 1550, Uloženie 1649, Dogovornye gramoty, etc.)<sup>69</sup>

<sup>69</sup> Some of the texts are part of a hybrid text (such as for instance Domostroj and the Writings of Posoškov).

It remains a controversial issue whether the nominative object construction is a characteristic of the northwestern region or if it is common to the whole of the east Slavonic area. The paucity of the surviving texts from the southern Russia area is the main problem. The oldest documents that have been analyzed date from the 14<sup>th</sup> and 15<sup>th</sup> centuries and are from the areas of Russia that had come under Lithuanian and Polish control. However, although some examples have been registered there (for instance, examples (79) - (81) from Old Ukrainian and Old Belarusian), this does not suffice to confirm that the construction did indeed originate there. The nominative object constructions in these texts could reflect a feature of the contemporary living language of these areas but could also have been inherited from the Muscovite chancellery language.

It is certain, however, that, especially in the 15<sup>th</sup> to 17<sup>th</sup> c., nominative object constructions were regularly used in the texts from the south Russian area (as discussed in detail in Kotkov 1959; 1969; Staniševa 1966; Filin 1972; Dunn 1978, 1982).

At the end of the 17<sup>th</sup> c., the construction seems to have disappeared from the written language (cf. Filin 1972; Timberlake 1974; Stepanov 1984; Krys'ko 1994; etc.). Some isolated examples have been found in sources from the 18<sup>th</sup> c., such as (82). As a marked variant, nominative object constructions can be found in texts of the 18<sup>th</sup> and 19<sup>th</sup> c., for example in literary texts (as in (83)), folklore texts (as in (84)), and in proverbs that represent rules based on common sense (as in (85), (86)).

- (82) example cited by Krys'ko (1994: 195) from historical materials of the Imperial Academy of Science, SPb, 1885-1993:

<i>eželi</i>	<i>soblagovolit'</i>	<i>akademija</i>	<i>vyšepisannaja</i>	<i>machiny</i>	<i>i</i>
if	deign	academy	of above-mentioned-	machines	and
		science	NOM.F.SG		
<i>voennaja</i>		<i>ramatura</i>	<i>sobrat'</i>		
military -NOM.F.SG		armature	- to-build-INF		
		NOM.F.SG			

'If the Academy of Science condescendingly admits the necessity to increase the above-mentioned huge thing [machine] and military armature'

- (83) example from Maksim Gorky, "The Lower Depths", 1902:

*Začem posuda bit'?*  
 why utensils-NOM.F.SG to-break-INF  
 'Why is it necessary to break utensils?'

(84) example from the Russian Song approx. 17<sup>th</sup> c.:

*Zderžati vsja zemlja svjat russkaja, otvoriti*  
*o*  
 to-hold - all- land- holy Russian- to-open-INF  
 INF NOM.F.SG NOM.F.SG NOM.F.SG  
*temna kel'ja, bereza krutiti*  
 dark - cell-NOM.F.SG birch- NOM.F.SG to-bind -INF  
 NOM.F.SG  
 'You must hold all holy Russian land, open the dark cell and bind the birch.'

(85) example cited by Lavrovskij (1852: 97) from a poetry book approx. 17<sup>th</sup> c.:

*podb starost' nado duša spati*  
 in old need – MOD soul - NOM.F.SG to-sleep - INF  
 'In old [age] the soul needs to sleep.'

(86) example from the Rus.posl. end of 17<sup>th</sup> c.:

*Ruka priložit' i duša položit'*  
 hand - NOM.F.SG to-put-INF and soul - to-invest - INF  
 NOM.F.SG  
 'Put your hand and put your soul [into what you do].'

The use of nominative object constructions in modern Russian dialects shows differences from Old (northern) Russian. With regular frequency, they have been attested in the north-western part of Russia, that is, in the dialects of Novgorod, Vologda-Vjatka, Archangel'sk and Olonetc. It seems, however, that noncanonical nominative objects are restricted to constructions with finite verbs (87) or to constructions with a dependent infinitive governed by the modal

predicative *nado* ‘need’ (88). The preservation of the nominative object construction in that area could be a result of continued linguistic contacts between Russian and Finnish (for more details, see Ambrazas 2001):

- (87) example cited by Kuz’miņa and Nemčenko (1964), 1949 from the Kalin dialect:

<i>Voda</i>	<i>iz</i>	<i>rečki</i>	<i>brali</i>
water - NOM.F.SG	from	river	take - PAST.3.PL

‘They have gotten water from the river.’

- (88) example from modern north Russian dialect cited in Kuz’miņa (1993: 17):

<i>nado</i>	<i>kosa</i>	<i>točit’</i>
need - MOD	scythe - NOM.F.SG	to-sharpen - INF

‘It is necessary to sharpen the scythe thin.’

In the contemporary south Russian dialects as well as in Ukrainian and Belarusian, noncanonical nominative object constructions are limited to the verbs of perception like *videt’* ‘to-see’ as in (89), *slychat’* ‘to-hear’ (90), *znat’* ‘to-know’ (Georgieva 1949, Lomtev 1949, Pigin 1954, Potebnja 1958, Sprinčak 1960):

- (89) example cited in Lomtev (1949: 22):

<i>Derevnja</i>	<i>vidat’</i>
village-NOM. F.SG	to-see-INF

‘It is possible to see the village.’

- (90) example cited in Lomtev (1949: 22):

<i>ottuda</i>	<i>voznja</i>	<i>slychat’</i>
there	romp-NOM. F.SG	to-hear-INF

“From there it is possible to hear a romp.”

These sentences express the modal meaning of “possibility” rather than “necessity”. The noun in the nominative (*derevnja* ‘village’ (89) and *voznja* ‘romp’ in (90)) has the function of the subject. The infinitive of the perception verbs indicates that the thing denoted by the nominative subject can be perceived by someone<sup>70</sup>. These examples can be equivalent to the sentence type

<sup>70</sup> The same construction can also be found in some dialects of Lithuanian (see Ambrazas 2001: 395-396)

*derevnja vidat*’ and the passive sentence *derevnja vidna*, which means ‘a village is to be seen.’ (Lomtev 1949: 23-24). In the Old Russian sources, one can also find examples with a nominative in the subject function with a verb of perception and ‘to be’ as in (91) and (92):

(91) Example from Codex Suprasliensis cited in Ambrazas (2001: 396):

*i glasъ umlīče. i ne by slyšati*  
and voice-NOM.F.SG silent and not was to-hear - INF  
‘And the voice became silent and was not to be heard.’

(92) Example from Old Russian text cited in Borkovskij (1979: 404) and translated by Ambrazas (2001: 96):

*bě v to vremja viděti... pečali gorīkaja*  
was in that time to-see - INF grief bitter - NOM.F.SG  
‘In that time bitter grief was to be seen.’

However, there is not enough dialectal material to be found, and the examples from the Old Russian sources are also too limited in number to provide clear information on the distribution and relationship between the infinitival constructions in which the nominative has the function of the object and the above-mentioned types in (89) - (92). Therefore, it can be hypothetically assumed that these two kinds of construction have a common origin but differ in their modal meanings.

The following table (14) lists the areas and time periods in which nominative object constructions have been attested:

**Table 14** Use of nominative object constructions in the various periods and areas.

	Periode	11 <sup>th</sup> - 13 <sup>th</sup> c.	13 <sup>th</sup> - 14 <sup>th</sup> c.	14 <sup>th</sup> - 15 <sup>th</sup> c.	15 <sup>th</sup> -17 <sup>th</sup> c.	Modern dialects
Area						
North-western part of Russia: Novgorod, Pskov, North Dvina, and other regions with a written tradition		The majority of the examples are PiCs, but types of SeC with finite verb and with dependent infinitive) are also represented.		In the official, legal texts, nominative object constructions seem to be limited to two types: PiCs and SeCs-1 with modal predicates ( <i>dostoit</i> ‘it is fit”, etc.)		North Russian dialects, but limited to (Eastern) Novgorodian, Vologodsk-Vyatskie, and only partly in north-western dialects
Moscow		some rare examples of PiC	All kinds of nominative object construction are represented here. They are especially frequent in the language of “ <i>prikazy</i> ” (the language of the government agencies), but also in hybrid texts.			

<b>South Russian</b>	No examples from this area from this time period		From the 16 <sup>th</sup> c. in the regions of Kursk and Voronež	In some of the southern dialects
<b>Central area</b>	No documents from this time periods			In some dialects of the central regions (cf. Nemčenko & Kuz'mina, 1964)
<b>Belarusian</b>	No documents	Smolensk-Plotsk area documents from the 13 <sup>th</sup> c.	In some regions of the Belarusian area, especially in the north and northwest (Troiki, Molodečno, Vil'no)	No examples
<b>Ukrainian</b>	No documents	A few rare examples	A few examples in administrative texts in later sources	No examples

## 5.2. Frequency distribution of PiCs in the Old and Middle Russian periods

The question of the distribution of NPiCs and the APiCs is still unresolved, and authors get different results owing to, for example, the contradictory assumptions made by Timberlake (1974) and Dunn (1978). The starting point of the present analysis was noting the occurrence of PiCs with a nominative and/or an accusative in the same kinds of text in different time periods in order to establish trends in the use of both constructional variants in different text categories (statutory and hybrid texts). To be able to compare the quality of the distribution, the results are shown separately for the Old Russian and Middle Russian periods in following tables (15, 16, 17).

**Table 15** Number of PiCs for the Old Russian period for statutory and hybrid texts.

#	TOKENS	TOT.N	PICS	NPICS	APICS	% OF PICS	% OF NPICS	% OF APICS
<b>1.1</b>	6781	47	12	9	3	25.53	75.00	25.00
<b>1.2</b>	5639	90	5	4	1	5.56	80.00	20.00
<b>1.3</b>	4453	85	11	6	5	12.94	54.55	45.45
<b>1.4</b>	782	13	1	1	0	7.69	100.00	0.00



1.5	2027	48	8	5	3	16.67	62.50	37.50
1.6	5130	87	26	20	6	29.89	76.92	23.08
1.7	4562	72	7	4	3	9.72	57.14	42.86

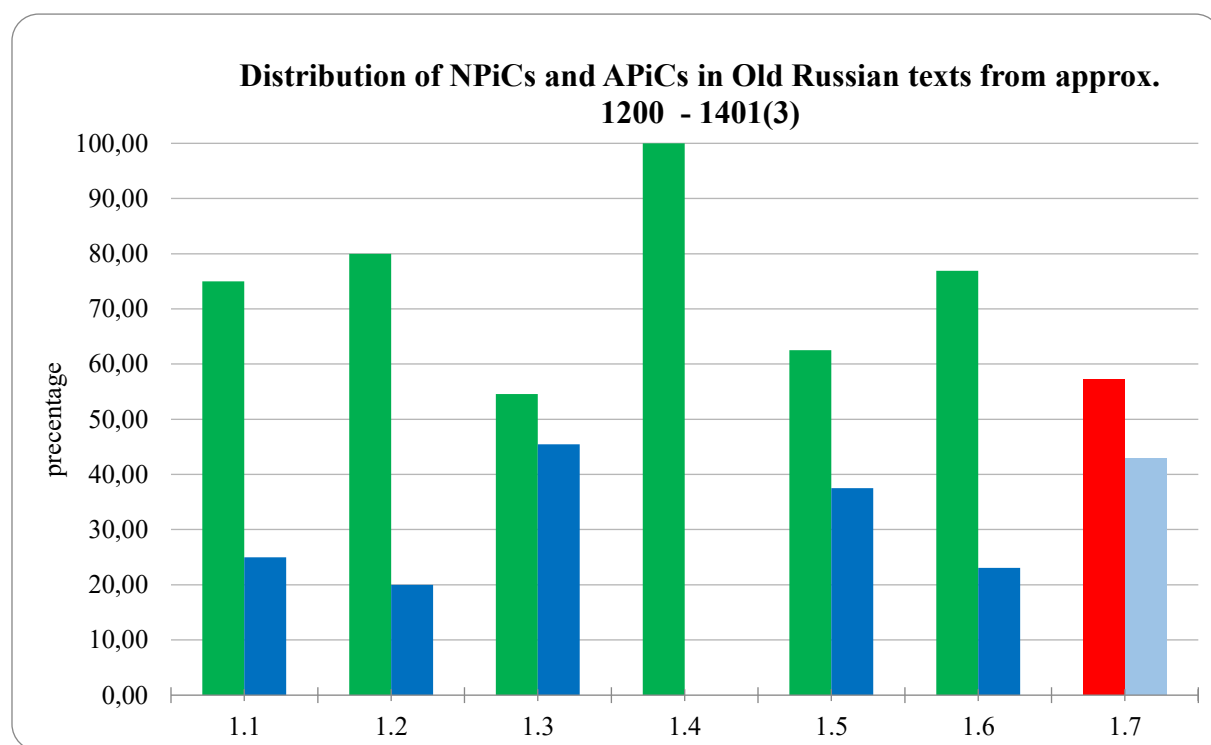
- 1.1 *Gramoty Velikogo Novgoroda i Pskova* (GVNP) [Charters of Great Novgorod and Pskov] (1264-1371)
- 1.2 *Akty sobrannye v bibliotekach i Archivach Rossijskoj Imperii Archeografičeskoju ekspediceju Imperatorskoj Akademii Nauk* (AARX) [Treaties, collected by the archeographic expedition of the Imperial Academy of Sciences in the libraries and archives of the Russian Empire.] (1294 - 1400)
- 1.3 *Russko-Livonskie Akty* (RLA) [Russian Livonian records] (1189 - 1299)
- 1.4 *Ustavnaja gramota Velikogo Knjazja Vasilija Dmitrieviča i Mitropolita Kipriana duchovnomu vedomstvu* (Ust.gr) [Statutory charter of the great Knyaz Vasilij Dmitrievič and Metropolitan Cyprian]
- 1.5 *Gramoty, kasajušiesja do snošenij Severno-Zapadnoj Rossii s Rigoju i Ganzejskimi gorodami v XII, XIII i XIV veke.* (GSZR) [Charters regarding the Relations of North-Western Russia with Riga and the Hanseatic cities in the 12<sup>th</sup>, 13<sup>th</sup> and 14<sup>th</sup> c.]
- 1.6 *Sobranie gosudarstvennyh gramot i dogovorov, chranyaščichsja v gosudarstvennoj kollegii inostrannyh del.* (SGGrD) [Collection of the state charters and treaties that are kept in the state council of foreign affairs. Part one.]
- 1.7 *Voprošanie Kirikovo.* (VK) [The Questions of Kirik]

Each text was given a reference index from 1.1 – 1.7 where the first number indicates the Old Russian period and the second number the specific text to which I also assigned a specific abbreviation to be further used in this study. The full bibliographical data presented in the list of abbreviations and detailed explanations of the sources was already provided in Chapter 4. The last text (1.7) in the table constitutes a hybrid text. The other six texts (1.1 – 1.6) are statutory texts (which include more than 70 different documents; cf. Chapter 4 for their description).

The first column contains the magnitude of each text in the total number of tokens. In the second column, the total number of constructions, both PiCs and SeCs, is presented (Tot.N). The third

column reports the number of PiCs found. The fourth and the fifth columns show the number of NPiCs and APiCs, respectively. These first five columns are the raw data extracted from CHaRLi. I used these data to calculate the distribution of all the PiCs and the relative distribution of NPiCs and APiCs. The sixth column gives the percentage of PiCs among the total, and the last two columns represent the relative percentage of NPiCs and APiCs.

The focus of attention was on the relative distribution of PiCs in these texts. The graph below visualizes the distribution of both constructions in terms of percentage as calculated from the corpus data. As in this period only one hybrid text was considered for the analysis, it will be accounted for together with the statutory texts in the following graph (Figure 15) Green and blue bars indicate the percentages of NPiCs and APiCs, respectively, in the statutory texts; red (NPiCs) and light blue (APiCs) refer to the hybrid text.



**Figure 15** Distribution of PiCs in the Old Russian sample.

Starting from this dataset, two conclusions may already be drawn, except for 1.4, for which only NPiCs were found. Firstly, the data show that these two constructions co-existed side by side in all the texts. Secondly, the graph clearly shows that, in almost all texts, NPiCs are predominant. As is common with ancient periods, there is a scarcity of sources, and, in the present case, also a limited amount of available material. Although the number of all

constructions relevant for this study (PiCs and SeCs) can be as high as a hundred, the PiCs are only a small fraction of them and are usually limited to less than a few dozen examples. Nevertheless, there are at least four texts in which the absolute number of NPiCs is big enough to draw a robust conclusion. 1.1, 1.2, 1.5, and 1.6 have a significant number of PiCs and clearly show a predominance of NPiCs over APiCs. This predominance can also be observed in all other texts.

The situation in hybrid texts is challenging and must be discussed here briefly. As can be seen in text 1.7, the NPiCs predominate over the APiCs. However, Dunn (1978) in his analysis of *Russkaya pravda* (RP), which is also a hybrid text, compared 12 different copies of this text written at different time periods and came to the conclusion that, especially in the oldest copies of this text, the APiCs predominate over the use of the NPiCs (cf. Chapter 4.1. for more details). In itself, however, this is not surprising and can be explained in different ways. As both texts were written in Novgorod, but show different tendencies, this difference cannot be explained by dialectal influences. Timberlake (1974) had earlier explained the preference for APiCs by the influence of the Church Slavonic tradition, in which accusative marking was common, but Dunn (1978) argued against this proposal because the oldest copies of RP (according to Obnorskij 1934) were not influenced by Church Slavonic. Another possible explanation for the predominant distribution of one or the other construction can be based on the lexical content of the verbs or the nouns that were used only with NPiCs, or APiCs, respectively, even though that did not exclude the observation that both construction patterns (especially in the hybrid texts) could still vary from text to text. Therefore, in Section 5.6., I shall introduce a qualitative analysis based on the selectional restrictions according to the semantics of the verbs in NPiCs and APiCs.

The following table (16) presents the data for the Middle Russian period for statutory texts. This table is structured in the same way as table (15).

**Table 16** Number of PiCs for the Middle Russian period for statutory texts.

#	TOKENS	TOT.N	PICS	NPICS	APICS	% OF PICS	% OF NPICS	% OF APICS
2.1	4394	41	12	10	2	29.27	83.33	16.67
2.2	5225	135	23	20	3	17.04	86.96	13.04

<b>2.3</b>	15777	193	30	23	7	15.54	76.67	23.33
<b>2.4</b>	2115	58	16	14	2	27.59	87.50	12.50
<b>2.5</b>	5320	100	36	28	8	36.00	77.78	22.22
<b>2.6</b>	709	25	6	5	1	24.00	83.33	16.67
<b>2.7</b>	1358	20	4	1	3	20.00	25.00	75.00
<b>2.8</b>	4003	159	6	5	1	3.77	83.33	16.67
<b>2.9</b>	13.322	81	26	21	5	32.10	80.77	19.23
<b>2.10</b>	5225	34	11	6	5	32.35	54.55	45.45
<b>2.11</b>	10.241	36	7	3	4	19.44	42.86	57..14
<b>2.12</b>	1.026	28	4	4	0	14.29	100.00	0..00
<b>2.13</b>	53326	116	36	23	13	31.03	63.89	36..11
<b>2.14</b>	2536	29	3	3	0	10.34	100.00	0.00
<b>2.15</b>	2299	12	0	0	0	0.00	0.00	0.00
<b>2.16</b>	1307	29	5	4	1	17.24	80.00	20.00
<b>2.17</b>	10.696	247	57	44	13	23.08	77.19	22.81
<b>2.18</b>	576	44	1	1	0	2.27	100.00	0.00

2.1 *Gramoty Velikogo Novgoroda i Pskova* (GVNP) [Charters of Great Novgorod and Pskov] (1434 – 1471)

2.2 *Akty sobrannye v bibliotekach i Archivach Rossijskoj Imperii Archeograficheskiju ekspediceju Imperatorskoj Akademii Nauk* (AARX) [Treaties, collected by the archaeological expedition of the Imperial Academy of Sciences in the libraries and archives of the Russian Empire.] (1404 – 1587)

- 2.3 *Russko-Livonskie Akty* (RLA) [Russian Livonian records] (1404 – 1603)
- 2.4. *Novgorodskaja Sudnaja Gramota* (NSG) [Novgorod Judicial Charter]
- 2.5. *Pskovskaja Sudnaja Gramota* (PSG) [Judicial charter of Pskov]
- 2.6 *Dvinskie gramoty* (Dvin.gr.) [Dvina charters]
- 2.7 *Akty, odnosjaščiesja k istorii Zapadnoj Rossii* (ASZR) [Treaties, belonging to the history of Western Russia]
- 2.8 *Akty juridičeskie, ili sobranie form starinnago deloproizvodstva* (Akty yur.) [Juridical records]
- 2.9 *Akty istoričeskie, sobrannye i izdannye archeografičeskoju kommissieju* (Akty istor.) [Historical records... of the archeographic commission]
- 2.10 *Akty Moskovskogo Gosudarstva, izdannye Imperatorskoju Akademiejju nauk* (AMG) [Treaties of the Muscovy] (1577 – 1601)
- 2.11 *Akty Moskovskogo Gosudarstva, izdannye Imperatorskoju Akademiejju nauk* (AMG) [Treaties of the Muscovy] (1614 – 1632)
- 2.12 *Pamjatniki diplomatičeskich snošenij moskovskago gosudarstva s Krymom, Nagajcami i Turceju* (PDSK) [Records of diplomatic relationships between Muscovy and Crimea, Nogais and Turkey]
- 2.13 *Stoglav* (Stoglav) [The Book of one hundred chapters]
- 2.14 *Dogovornaja Gramota (v kopii) Velikogo Knjazja Rjazanskogo Ivana Vasil'eviča s bratom ego rodnym Knjazem Feodorom Vasil'evičem* (Dog.gr.1496) [Negotiated charter (copy) of the Great Knyaz of Ryazan' Ivan Vasil'evich with his brother Knjaz' Fjodor Vasil'evich]
- 2.15 *Dve dogovornye vzaimnye Gramoty Gosudarja i Velikogo Knjazja Vasilija Ioannoviča, i syna ego Velikogo Knjazja Ivana Vasil'eviča, s bratom ego Knjazem Jur'em Ivanovičem* (Dog.gr.1531) [Two negotiated charters of the monarch and the Great Prince Vasilij Ioannovič and his son Great Prince Ivan Vasil'evič with his brother Prince Jurij Ivanovič]

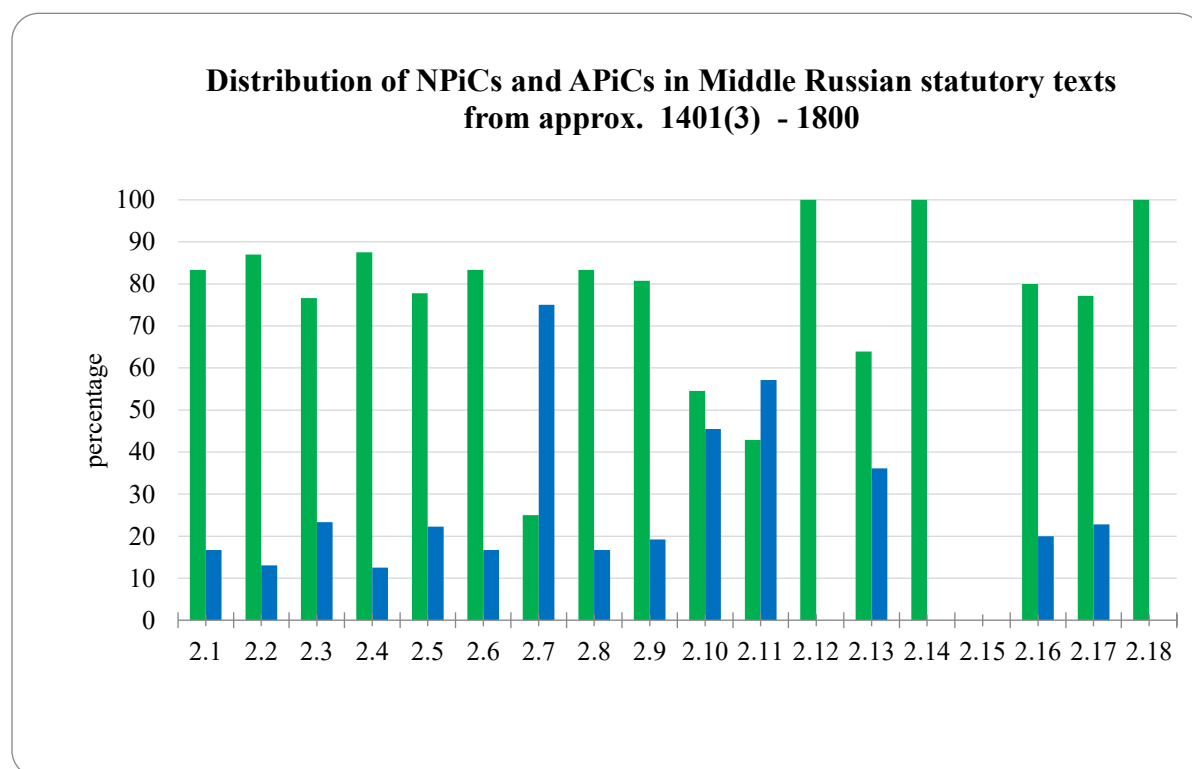
2.16 *Žalovannaja (podtverditel'naja) ustavnaja namestničja gramota* (Zhal. gr.) [Authorized vicar's letters]

2.17 *Otkaznye knigi* (OKB) [Renouncement books]

2.18 *Vvoznaja gramota voevody kn. Vasilija Ivanoviča Bujnosova* (Vvoz.gr.) [Import charter]

As above, each text was given a reference index from 2.1 – 2.18 where the first number indicates the Middle Russian period and the second number the specific text to which I assigned a specific abbreviation to be further used in this study. For the full bibliographical data presented in the list of abbreviations and a detailed explanation of the sources, see Chapter 4; more details of some of the texts are given in the appendix.

The graph (Figure 16) on this page shows the distribution of both constructions in statutory texts in terms of percentage as calculated from the corpus data. Green and blue bars indicate the percentages of NPiCs and APiCs, respectively.



**Figure 16** Distribution of PiCs in the Middle Russian sample.

In the list of documents above, the first three documents (2.1 – 2.3 - GVNP, AARX, RLA) were also treated among the Old Russian texts (1.1 – 1.3), as they were written over both time

periods. As can be seen, 2.1. (GVNP) and 2.2. (AARX) confirm the trend of 1.1. and 1.2, with an even more marked predominance of NPiCs over APiCs. For 2.3, the same tendency as in the other two can be observed: a predominance of NPiCs over APiCs.

By comparing all texts also in the Middle Russian period, most of them clearly show the predominance of NPiCs, with some exceptions. In text 2.15 (Dog.gr.), no PiCs were found, only SeCs; in 2.16, only one example of an NPiC was found; and no APiCs in texts 2.7 (ASZR), 2.10, and 2.11 (both AMG from different times: 2.10 AMG dating from 1577 – 1601 and 2.11 AMG dating from 1614 – 1632). In 2.10, NPiCs predominate slightly. In 2.7 and 2.11, however, there is a clear predominance of APiCs. This distribution could be explained by the influence of extralinguistic factors, as the documents (2.7) were composed in western Russia where the use of NPiCs was never a norm. The documents from Moscow (AMG, 2.10 and 2.11) are especially interesting. Here, the tendency from two different periods is inverted: APiCs become more frequent in the later texts; this possibly reflects a gradual removal of NPiCs from the official language of Moscow. It also indicates that the disappearance of NPiCs was not just a “sudden” process (cf. Bicilli 1933: 207). In the first group, 2.10, the use of both variants was similar, and in 2.11, APiCs predominate over NPiCs, so that NPiCs start to be replaced by APiCs. This fact supports the assumption made in previous works that the disappearance of NPiCs dates from the end of the 17<sup>th</sup> century, and that they might be understood as a dialectal feature of Northern Russian regions, especially in statutory texts. However, because APiCs and NPiCs are used in other documents from the same area side by side, this should be interpreted merely as a tendency, not a rule. Moreover, as already mentioned by Dunn (1978: 180-186), it seems that the use of NPiCs in later texts (from the 16<sup>th</sup> to the 17<sup>th</sup> c.) changed due to the APiCs in so-called “atypical” or reanalyzed environments. A closer look at the examples with NPiCs in the above-mentioned texts shows that most of them appear in sentences that are introduced by the complementizer *čtoby* ‘to; in order to’ as in example (93), whereas NPiCs in earlier texts (Old Russian) do not appear in sentences with this kind of complementizer. However, it will be pointed later out that this does not apply to the hybrid texts that also date from the 17<sup>th</sup> century, in which most examples with the complementizer *čtoby* appear with the accusative (APiC). as in example (94):

- (93) Stoglav:
- |              |            |               |                |                |
|--------------|------------|---------------|----------------|----------------|
| <i>Čtoby</i> | <i>im</i>  | <i>imati·</i> | <i>svoja</i>   | <i>pošlina</i> |
| COMP         | they - DAT | to-have-INF   | own - NOM.F.SG | tax - NOM.F.SG |

*po* *starine* *v* *carstvujušem* *grade* *Moskve*  
 according to custom in reigning town Moscow

‘It is for them to have their own tax according to custom in the reigning town of Moscow.’

(94) Pos.:

*Čtoby* *ot* *vsjakija* *svoego* *polovinu* *ili*  
 COMP from all owe half - ACC.F.SG or

*dvacatinu* *platiti*

twenty to-pay – INF

‘It is to pay from everything (you) owe one half or twentieth.’

The following table (17) presents the data for the Middle Russian period for hybrid texts.

This table is structured in the same way as the tables above.

**Table 17** Number of PiCs for the Old Russian period for hybrid texts.

#	TOKENS	TOT.N	PICS	NPICS	APICS	% OF PICS	% OF NPICS	% OF APICS
2.19	3.923	89	15	11	4	16.85	73.33	26.67
2.20	493	87	13	9	4	14.94	69.23	30.77
2.21	493	20	13	12	1	35.00	85.71	14.29
2.22	26.928	360	91	74	17	25.28	81.32	18.68
2.23	83.608	334	110	77	33	32.93	70.00	30.00
2.24	67.327	573	154	112	42	26.88	72.73	27.27
2.25	26.928	997	145	83	62	14.54	57.24	42.76

2.19 *Sudebnik Velikago Knjazja Ioanna Vasil’eviča* (Sud. Kn. Vas. 1497) [Sudebnik of the Great Knyaz Ivan Vasilyevich, 1497]

2.20 *Sudebnik 1497 goda. S. I. Shtamm* (Sud. St. 1497) [Code of Law of 1497]

2.21 *Lunnik. Primety po dnyam luny* (Lun.) [Lunar calendar]



2.22 *Domostroj* (Dom.) [Domestic Order (book of moral codex)]

2.23 *Sobornoe Uloženie 1649 goda* (Sob. Ul.) [Code of law of 1649]

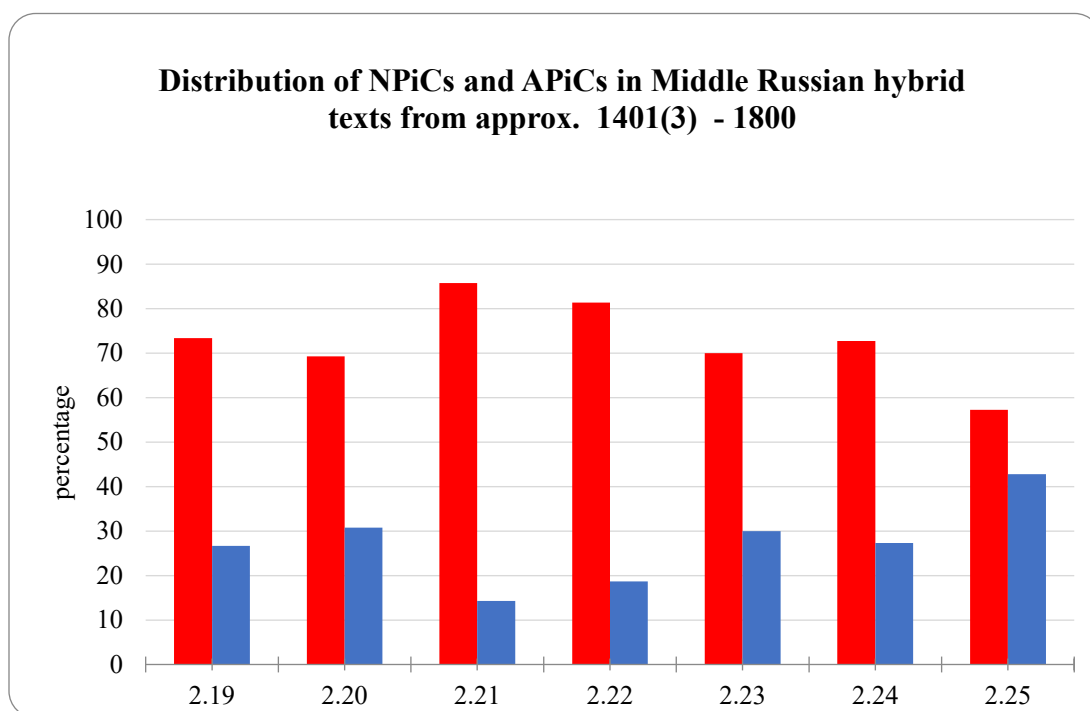
2.24 *Kniga o skudosti i bogatstve, I.T. Posoškov.* (Pos.) [The book about poverty and wealth written by I.T. Posoškov]

2.25 *Akty chozjajstva bojarina B. I. Morozova* (Mor.) [Treaty of the household of the boyar B. I. Morozov]

As above, each text was given a reference index from 2.19 to 2.25 where the first number indicates the Middle Russian period and the second number the specific text to which I assigned a specific abbreviation to be further used in this study. For the full bibliographical data presented in the list of abbreviations and detailed explanation to the sources, see Chapter 4.

In the hybrid texts, there is a considerable increase in the number of both PiCs and SeCs.

The graph below (Figure 17) visualizes the distribution of both constructions in hybrid texts in terms of percentage, as calculated from the corpus data. Red and blue columns indicate the percentages of NPiCs and APiCs, respectively.



**Figure 17** Distribution of PiCs in the Middle Russian sample (hybrid texts).

Also, in this case, the data confirm the trend seen in other text categories, indeed it is even more marked. Together with the enlarged number of examples, this further confirms the predominance of NPiCs. Comparing all these facts, it can be generally assumed that in the Middle Russian period, the use of NPiCs became more unambiguous, that is, APiCs are used consistently less frequently in all kinds of text, also in the hybrid texts where, in the Old Russian period, a difference was visible.

### 5.2.1. Temporal trends in the distribution of NPiCs and APiCs

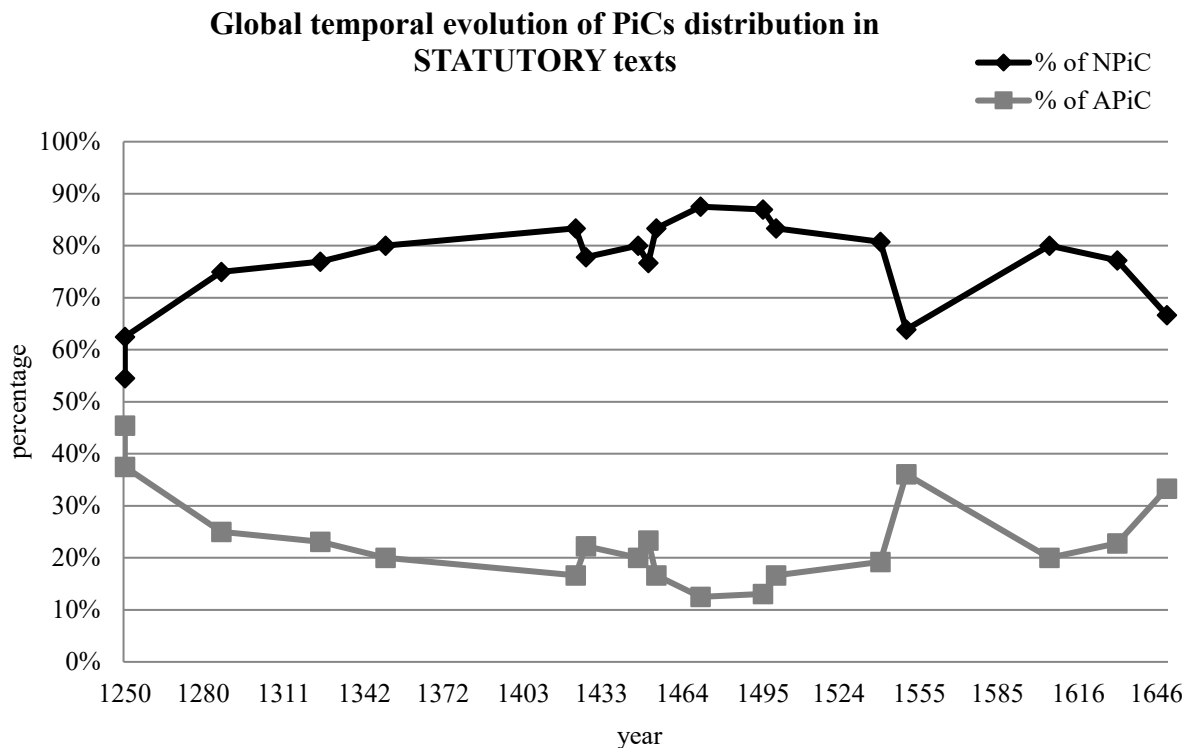
In order to summarize the results from previous sections regarding the distribution of PiCs in individual texts, data now relevant for this section were sampled according to the text categories and time periods. This served to identify possible trends in the use of PiCs during the period of their existence in the written language. The following table (18) presents the data from both periods for the statutory texts

**Table 18** Number of NPiCs and APiCs in all samples.

<b>STATUTORY</b>	<b>TIME SPAN</b>	<b>YEAR</b>	<b>% OF NPICS</b>	<b>% OF APICS</b>
<b>RLA (1.3)</b>	1200 - 1400	1250	54.55	45.45
<b>GSZR (1.5)</b>	1200 - 1400	1250	62.50	37.50
<b>GVNP (1.1)</b>	1200 - 1400	1287	75.00	25.00
<b>SGGRD (1.6)</b>	1200 - 1400	1325	76.92	23.08
<b>AARX (1.2)</b>	1200 - 1400	1350	80.00	20.00
<b>DV.GR. (2.6)</b>	1401 - 1601	1423	83.33	16.67
<b>PSG (2.5)</b>	1401 - 1601	1427	77.78	22.22
<b>DVE DOG (2.15)</b>	1401 - 1601	1447	80.00	20.00
<b>RLA (2.3)</b>	1401 - 1601	1451	76.67	23.33
<b>GVNP (2.1)</b>	1401 - 1601	1454	83.33	16.67
<b>NSG (2.4)</b>	1401 - 1601	1471	87.50	12.50
<b>AARX (2.2)</b>	1401 - 1601	1495	86.96	13.04
<b>AKTY JUR. (2.8)</b>	1401 - 1601	1500	83.33	16.67
<b>AKTY ISTOR. (2.9)</b>	1401 - 1601	1540	80.77	19.23
<b>STOGLAV (2.13)</b>	1401 - 1601	1550	63.89	36.11

<b>ŽAL. GR. (2.16)</b>	1601 - 1700	1605	80.00	20.00
<b>OKB (2.17)</b>	1601 - 1700	1631	77.19	22.81
<b>MDBP (DUNN)</b>	1601 - 1700	1650	66.67	33.33

In this table, the first column abbreviations and the index of the texts refer to the statutory texts that have been listed in the previous sections, but have now been organized chronologically (whereas the text index does not refer to the chronological order, but to the text name). Some texts had to be excluded from the analysis, for example, the texts Ust.gr. (1.4), PDSK (2.2), Dog. gr. (2.14), Vvoz.gr. (2.18), because they only contain NPiCs and no APiCs. However, these texts are still relevant for the analysis in so far as they contain examples of SeCs and are therefore significant for further research. AMG (2.10 and 2.11) were also excluded as they were already discussed in the section above. On the other hand, there is the group of texts analyzed by Dunn (Dunn 1978: Appendix 3), that is, MDBP (*Moskovskaja delovaja i bytovaja pis'mennost' 17 veka* ('Moscow official and domestic documents from the 17<sup>th</sup> c.'). This collection included different kinds of letters and documents (more than 140) written by different people and arranged in chronological order (from 1617 to 1698); it was included in this analysis in order to complete the analysis with texts from the later Middle Russian period. The second column refers to the period (or time span), which was divided into smaller subperiods for the Old Russian period (1200 – 1400), the early Middle Russian period (1401 – 1601) and the later Middle Russian period (1601 – 1700). The third column refers to the mean reference year, calculated to facilitate categorization. The fourth and fifth columns provide information about the relative frequencies of the NPiCs and APiCs in the respective documents. To investigate temporal trends in the distribution of the PiCs, these data points were ordered according to the year of publication for the statutory texts (Figure 18) and the hybrid texts (Figure 19):



**Figure 18** Overview of the frequencies of NPiCs and APiCs in statutory texts in CHaRLi.

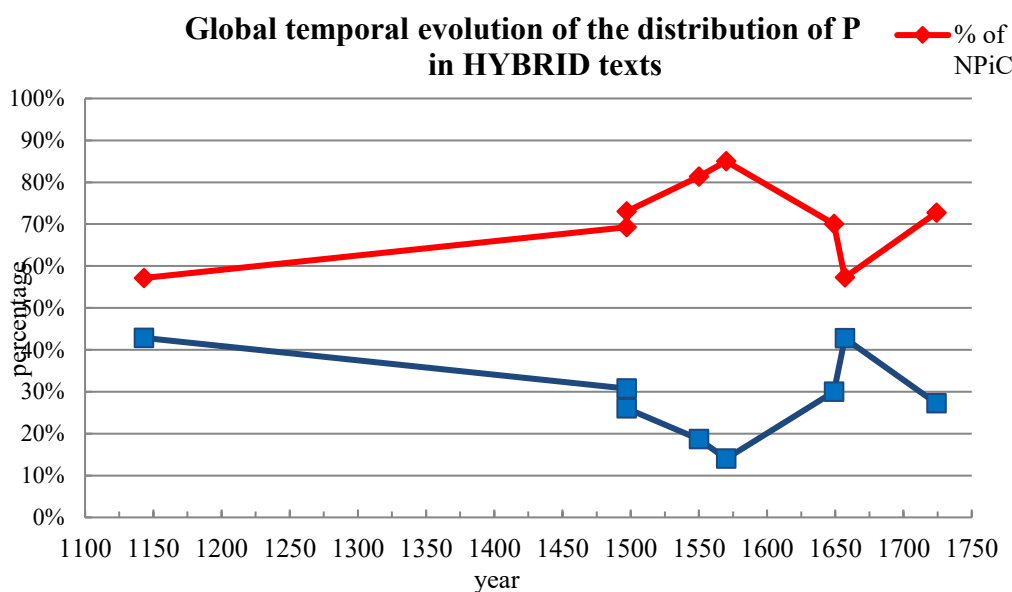
For the statutory texts, at the beginning there is almost an equal distribution of NPiCs and APiCs, with a slight predominance of NPiCs. During the examination of other texts, which are a part of RRuDI and represent the Old Russian period, I found some solitary examples of NPiCs in the absence of any APiCs; this also supports the thesis of the predominance of NPiCs in the early period independent from text sorts. Starting from the 13<sup>th</sup> c. onwards, there is a clear predominance of NPiCs. However, from the 16<sup>th</sup> c., a general negative trend can be observed for NPiCs with a corresponding increase of APiCs. This suggests that the decline of NPiCs was a gradual process spread over a century and continuing for more than three centuries. Thus, the disappearance of NPiCs from the written language was not a change that occurred suddenly (as supposed, e.g., by Bicilli 1933).

The following table (19) presents the data for hybrid texts from the Old and Middle Russian periods. This table is structured in the same way as the tables above.

**Table 19** Distribution of NPiCs and APiCs in all samples.

HYBRID	TIME SPAN	YEAR	% OF NPiCS	% OF APiCS
VK (1.7)	1200 – 1400	1143	57.14	42.86
SUD.KN.VAS.1497 (2.20)	1401 – 1601	1497	69.23	30.77
SUD.ST. 1497 (2.19)	1401 – 1601	1497	73.00	26.00
DOM. (2.22)	1401 – 1601	1550	81.32	18.68
LUN. (2.21)	1401 – 1601	1570	85.00	14.00
SOB.UL (2.23)	1601 – 1700	1649	70.00	30.00
MOR. (2.25)	1601 – 1700	1657	57.24	42.76
POS. (2.24)	1601 - 1700	1724	72.73	27.27

With respect to the absolute frequency of NPiCs in hybrid texts, the sample was smaller. Figure 19 demonstrates that the use of NPiCs has steadily increased over time. However, this fact cannot be generalized for the use of NPiCs in all hybrid texts, because it could also depend on different subjective factors that need to be discussed for each text individually in more detail. The following graph visualizes the results of the above table and indicates the tendency in the distribution of PiCs in hybrid texts analyzed in this study.



**Figure 19** Overview of the frequencies of NPiCs and APiCs in hybrid texts in CHaRLi

These findings show a different behavior from the one postulated in the works of Timberlake (1974) and other linguists. The corpus data demonstrate that, throughout, the two variants co-existed as freely interchangeable alternatives, although a gradual tendency for NPiCs to supersede the use of APiCs can be observed.

### 5.2.2. Distribution of primary constructions and their variants according to word order

The next step was to identify all possible types of NPiC and APiC variants according to their word order (SVO, OVS, VSO, etc.) and then to determine if there is some preference for the use of one type of construction (by inversion of the word order or absence of some of the constructional components). Prototypically, PiCs include a maximum of three components and must have had a marked SOV word order: optional logical dative subject (S) → nominative/accusative object (O) → infinitive verb (V). In the analyzed sources, many different word combinations could be found although most studies have argued that the pre-verbal object position is “normal” / “usual” for NPiCs (e.g., Borkovskij 1949, Lavine & Franks 2005, etc.; cf. the detailed discussion in Chapter 3). On the other hand, Timberlake (1974: 14) argued that word order has nothing to do with a preference for NPiCs but was only caused by a “stylistic preference” for the pre-verbal object positioning. Therefore, it is still unclear whether the word order (the distance from the object to its predicate, and the inverted word order) did indeed influence the noncanonical nominative marking rather than the canonical object marking and, on the other hand, whether any changes have been observed over time.

In the following table (20), different types of construction have been presented with sentences extracted from the corpus according to the differing word order. In the first column, the word order of elements is represented schematically; in the second and third columns, examples from Old or Middle Russian sources taken from CHaRLi illustrate the use of each type of NPiC and APiC (here, the examples will be not translated, as they should just illustrate the elicited pattern). In the table below, the word order of elements in the PiCs is marked with S = subject or Ø = without overt subject; O = object and V = predicate:

**Table 20** Different constructional variants for NPiCs and APiCs with examples from CHaRLi

Word Order	Examples for NPiCs	Examples for APiCs

<b>SOV:</b> DAT + NOM/ACC + INF	<i>ino· emu</i> (DAT), <i>·pravda</i> (NOM)· <i>dat'</i> ·(INF)	<i>i Lavrent'ju</i> (DAT) <i>otčinu svoju</i> (ACC) <i>vykoupiti</i> (INF) <i>svoimi kounami</i>
<b>SVO:</b> DAT + INF + NOM/ACC	<i>ino·tebě</i> (DAT)· <i>vzjati</i> (INF)· <i>poltina</i> (NOM)	<i>(dijaku)</i> (DAT) <i>platiti</i> (INF) <i>iscevu istinu</i> (ACC) <i>bez rostu.</i>
<b>OVS:</b> NOM/ACC + INF + DAT	<i>A·černa-kuna</i> (NOM)· <i>imati</i> (INF)· <i>tobe</i> (DAT)	<i>a·drugaja·polovina</i> (NOM)· <i>otdat'</i> (INF)· <i>čelobitčiku</i> (DAT)
<b>OSV:</b> NOM/ACC + DAT + INF	<i>i·prodaža</i> (NOM)· <i>bojarinu·i·dijaku</i> (DAT)· <i>deliti</i> (INF)	<i>i·pechat'·svoju</i> (ACC)· <i>Knjazju·Mesteru</i> (DAT) <i>kъ sej·gramote·privěsiti</i> (INF)
<b>VSO:</b> INF + DAT + NOM/ACC	<i>a·znati</i> (INF)· <i>tebě</i> (DAT)· <i>svoja·černa-kuna</i> (NOM)	<i>a služit'</i> (INF) <i>imъ</i> (DAT) <i>rjadovuju službu</i> (ACC)
<b>VOS:</b> INF + NOM + DAT	<i>čto·imati</i> (INF)· <i>milostyna·</i> (NOM) <i>i·tebě·carju·gosudarju</i> (DAT)	<i>dati</i> (INF) <i>volju</i> (ACC) <i>im</i> (INF)
<b>ØOV:</b> Ø + NOM/ACC + INF	<i>zemlja</i> (NOM) <i>pachat'</i> (INF)	<i>ruku</i> (ACC) <i>priložit'</i> (INF)
<b>ØVO:</b> Ø + INF + NOM/ACC	<i>dat'</i> (INF) <i>gramota</i> (NOM)	<i>varit'</i> (INF) <i>kašu</i> (ACC)

Abbreviations: NOM = nominative case, ACC = accusative case, INF = infinitive verb, DAT = logical dative subject; Ø = without logical dative subject.

In the next step, the above-listed constructional PiC variants are shown with respect to their distribution in the Old and Middle Russian samples. The following tables summarize the percentage distribution for each constructional variant according to the word order in all PiCs for the Old Russian period (table 21).

**Table 21** The distribution of constructional variants of NPiCs and APiCs in the Old Russian period

**FOR THE NPIC VARIANTS**

**FOR THE APIC VARIANTS**

<b>SOV: 87%</b>	<b>SOV: 6%</b>
<b>SVO: 3%</b>	<b>SVO: 4%</b>

<b>OVS: 2%</b>	OVS no examples found
<b>OSV: 3%</b>	OSV: 1%
<b>VSO: 2%</b>	VSO no examples found
<b>VOS: 1%</b>	VOS: no examples found
<b>ØOV: 1%</b>	ØOV: no examples found
<b>ØVO: 1%</b>	<b>ØVO: (89%)</b>

Abbreviations: S = overt subject, O = overt object; V = predicate; Ø = absence of an overt subject.

A clear preference for the use of the NPiC with a logical subject in the dative (87% of all occurrences) is evident, and the opposite is evident for APiCs (only 6% of all occurrences also had a dative). This analysis shows that: 1) NPiCs usually (87%) occur in the preverbal position, and the noun in the accusative does not seem to do so in the Old Russian period. 2) The dative logical subject was frequently used directly preceding the object NP, although it is always in the preverbal position to the infinitive verb. These facts can be used to support Timberlake's and Babby's assumption that the occurrence of a nominative object depended on the presence of a quirky subject in the dative. So, it is of interest to see whether this distribution of preferences in constructional types also existed in the Middle Russian period. In the middle Russian texts, the use of the dative seems no more obligatory than in the NPiCs (only 60% of all sentences with a nominative in the object position also include a dative subject, and 40% occur without a dative; in the accusative construction, 87% occur without a dative and 13% with a dative).

**Table 22** Different constructional variants of NPiCs and APiCs with examples from CHaRLi.

<b>FOR NPIC VARIANTS</b>	<b>FOR APIC VARIANTS</b>
<b>SOV: 40%</b>	<b>SOV: 41%</b>
<b>SVO: 16%</b>	SVO: 10%
<b>OVS: 4%</b>	OVS: 2%
<b>OSV: 5%</b>	OSV: 3%



<b>VSO: 2%</b>	VSO: 2%
<b>VOS: 3%</b>	<b>VOS: 29%</b>
<b>ØOV: 28%</b>	OVØ: 10%
<b>ØVO: 2%</b>	ØVO: 3%

Abbreviations: S = overt subject, O = overt object; V = predicate; Ø = absence of an overt subject.

So, in the middle Russian period (table 22), the slight difference in the use of the NPiC and APiCs according to different positions of the object NP is notable. APiCs also prefer to stay in the preverbal position, like NPiCs. By comparing the two tables, the preferred use of the dative in the position directly preceding the nominative noun in the object position can be identified, but this does not seem to be a significant position for the infinitive verb. Instead, the use of APiCs does not seem to be influenced by the presence or absence of the logical dative subject; its position also seems to be irrelevant (there are very few cases in which the logical dative subject is in the position after the accusative noun or in the preverbal position to an infinitive).

In the first and second steps of this analysis, some clearly dependent structures could be identified. As also assumed in previous studies, the use of both variants (NPiCs and APiCs) must have been influenced by the presence or absence of a logical dative subject (DatS) and by the word order. In the next sections, the statistical relevance of these two factors will be tested.

### **5.3. The relation between the choice of construction and two factors: Dative subject and word order for PiCs and SeCs**

As already discussed in Chapter 3, most previous studies considered a possible relation between the choice of a noncanonical nominative or a canonical accusative object marking (construction type) and the presence or absence of a logical dative subject (DatS) as well as the word order in the construction (e.g., Babby 2009, Lavine & Franks 2006). In the present section, I investigate the statistical significance in the position of the nominative/accusative argument with respect to the verb (preverbal, postverbal), and the presence of a DatS. In order to determine the significance values for the interactions and to reveal the strongest determining variable as well as any differences with respect to the time periods, I used logistic

regression.<sup>71</sup> This approach allows the prediction of “binary outcomes”, such as the presence vs. absence of DatS, and the pre- vs. postverbal position of the argument in the object, and their influence on the choice of construction. In order to compare the difference between the observed values (i.e., the actual frequencies in the corpus) and the expected values (i.e., those that would be expected if no factor other than chance affected the frequencies), the  $\chi^2$  and Fischer tests were used for all correlations in this study (cf. Baayen 2008). Both tests are useful to verify if an external variable has a statistically significance influence on the observed linguistic phenomenon and are used in the analysis of contingency tables. Fischer’s test is more reliable in the case of very low frequencies (which is often a case in diachronic linguistic studies). The output of both tests is the *p* (or probability) value. By convention, in corpus linguistic studies it is assumed that a *p* value lower than 0.05 implies a rejection of the null hypothesis, meaning that there is an actual effect of the considered variable. Thus, the greater the difference (the absolute value) between the observed values and the expected values, the less likely it is that the difference is caused by chance; conversely, the closer the observed values are to the expected values, the more likely it is that the difference was caused by chance.

The data set was prepared as a two-dimensional table in which the entries are the absolute frequencies of the construction in the considered cases. As a first step, I looked for a correlation between the choice of the type of construction and the factors I took into consideration. After this, I tested whether the differences were large enough to be significant, that is, not explainable as merely stochastic artifacts.

For the first step, I used the  $\chi^2$  test for independence, then by using linear regression, I modeled the “preference” ratings for NPiCs and APiCs. I included the two grouping factors, NPiC and APiC (variant 1 or 2), as random effects in the model. The predictors were “word order”, which in my analysis means the pre- or postverbal position of the object NP in the nominative or accusative, and the presence or absence of DatS. The same analysis was performed both for the Old Russian and the Middle Russian periods.

Because only PiCs weretested, the data frame for Old Russian consists of 70 observations of the two variants of the construction, which, in the analysis framework, are labeled

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<sup>71</sup> Logistic regression is a technique that attempts to “predict usage”. If the statistical model can accurately predict the type of construction (NPiC or APiC) by using a set of associations and dissociations, then one can say that these associations and dissociations accurately describe the “type” in question. Different types that can be “predicted” include linguistic features, register, diachronic periods, etc.

“CONSTRUCTIONS”. The independent factors are labeled “DatS”, which can have a dual outcome (YES for their presence, NO for their absence), and “Position”, which can also have a dual outcome (PRE- if the object NP is placed in the preverbal position to the infinitival verb, and POST if it is in the postverbal position). This leads, in total, to four possible manifestations of the construction: (Yes/POST), for the presence of DatS and the object NP in the postverbal position, (No/POST) for the absence of DatS and the object NP in the postverbal position, (Yes/PRE) for the presence of DatS and the object NP in the preverbal position, and, last, (No/PRE) for the absence of DatS and the object NP in the preverbal position. The results for the Old Russian period are reported below:

The results with numbers for Sample I (approx. 1201 – 1401)

```
> table (CONSTRUCTION, DatS:POSITION)
```

	no:POST	no:PRE	yes:POST	yes:PRE
APiCs	6	4	7	4
NPiCs	2	7	14	26

Pearson’s  $\chi^2$  test

Data: table (CONSTRUCTION, POSITION)

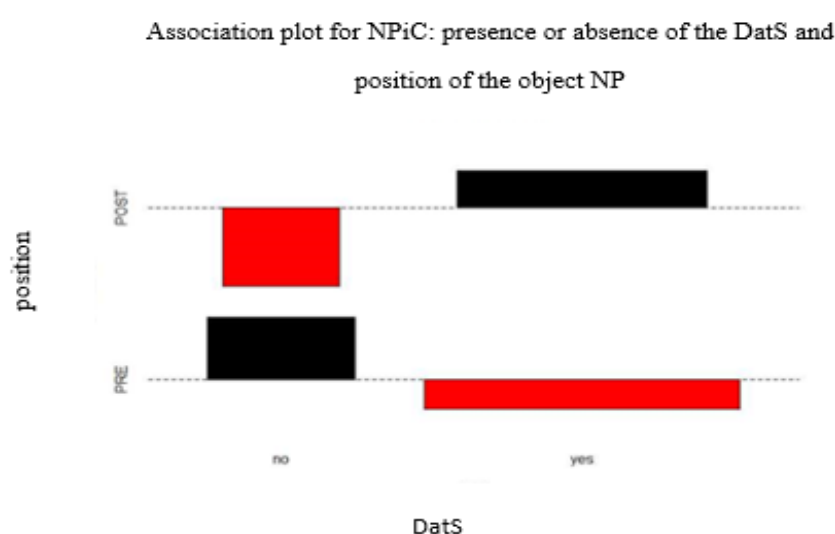
X-squared = 2.838, df = 1,  $p$  value = 0.09206

Data: table (CONSTRUCTION, DatS)

X-squared = 5.1146, df = 1,  $p$  value = 0.02373

Comment: These results show that, first, the logistic regression model fits the data well. The regression coefficients of logistic regression indicate the effect of the individual predictor variables (presence or absence of DatS and pre- or postverbal position of the nominative or accusative argument) on the outcome (construction: NPiC or APiC). The  $p$  values for each of the two factors, namely “Position” and “DatS”, provide different results. According to the test result, the position of the object NP in respect to the infinitival verb in the NPiCs was not as significant ( $p$  value=0.09) as was supposed. Therefore, this result provides strong evidence against this null hypothesis, as the  $p$  value is too high; this means that the interactions between this factor and the choice of the construction are not significant. On the other hand, this test provides strong evidence in favor of the null hypothesis ( $p$  value =0.02), that is, that the use of the nominative correlates with the appearance of the logical dative subject.

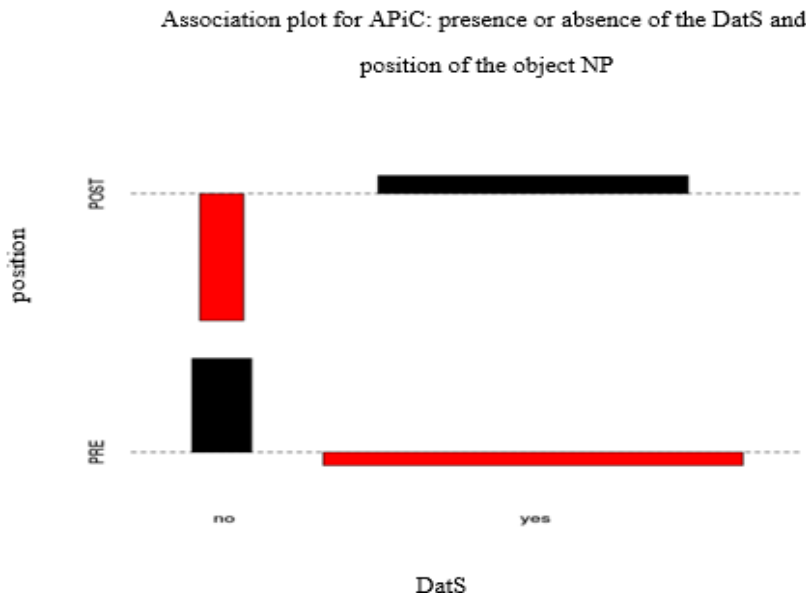
The findings show that the effect of these two factors on the choice of construction does indeed differ in the predictable power or significance for the choice of NP<sub>i</sub>C or AP<sub>i</sub>C. The association plot (Figure 20) function below provides an image of how these two variables (presence or absence of DatS [yes/no] on the x-axes and the position of the accusative or nominative noun [PRE “pre-verbal”/POST “post-verbal”] on the y-axes) are correlated with the choice of construction in the data frame for Old Russian. The black boxes on top of the dashed lines and the red boxes below the dashed lines represent cell frequencies that are larger or smaller than expected, respectively (dashed lines); the heights of the boxes are proportional to the above residuals, and the widths are proportional to the square roots of the expected frequencies:



**Figure 20** Association plot for NP<sub>i</sub>Cs (Old Russian).

Comment: It is interesting that for different constructions, the significant factors can vary. In the Old Russian data frame, the presence of DatS seems more relevant than the position, which has certain structural and semantic affinities.

The next association plot (Figure 21) also visualizes the calculated relation between the choice of the AP<sub>i</sub>C and the two factors: DatS and the position of the object to the infinitive also for the data frame of the Old Russian period.



**Figure 21** Association plot for APiC (Old Russian).

Comment: The above association plots for NPiCs (Figure 20) and APiCs (Figure 21) demonstrate the difference in the relation of the choice of the construction and two predictive variables. In the top plot (Fig.20), with an apparent DatS, the nominative argument takes the postverbal position, whereas with the disappearance of DatS, it takes the preverbal position. The APiCs appear mostly in the postverbal position, independent of the presence or absence of DatS.

As the results of the  $\chi^2$  test clearly showed a significant correlation between the choice of the NPiC and the presence of the DatS merely as the pre or postverbal position of the object NP, the next step of my analysis was to quantify the size of this effect. For this, I used as a correlation coefficient, the so-called Cramer value (suggested, e.g., in Gries 2013: 304<sup>72</sup>). The value of  $V$  falls between 0 and 1. A value close to 1 indicates a stronger correlation. The results for the first data frame computed in R with the following results, shows a strong correlation between the choice of the NPiC and the presence of DatS:

---

<sup>72</sup> Cramer's  $V$  is computed as:

$$\text{Cramer's } V = \sqrt{\frac{\chi^2}{n \cdot (\min(n_{\text{rows}}, n_{\text{columns}}) - 1)}} \quad (\text{e.g. Gries 2013: 304-305}).$$

```
sqrt(chisq.test(table(CONSTRUCTION,DatS),correct=FALSE)$statistic/sum(table(CONSTR  
UCTION,DatS))*(min(dim(table(CONSTRUCTION, DatS)))-1))
```

Pearson's  $\chi^2$  test **0.4963836**  
> table(CONSTR1,DatS)

DatS

CONSTR1 no yes

AcI 18 38

NcI 53 140

Comment: This is a large effect size that also supports the null hypothesis about the correlation between the choice of the noncanonical nominative object marking and the presence of the DatS.

The same test was performed to compare the results for the Middle Russian period. The data frame for Old Russian consists of 283 observations of two types of construction (in the table as CONSTRUCTIONS) for statutory texts and 535 for hybrid texts. However, the hybrid texts will be analyzed separately for each text in order to be accurate with the interpretations of the results. The independent factors: presence of DatS (YES/NO) and position of the object NP in respect to the infinitival verb (PRE/POST) again has four levels.

Sample II (approx.1401 – 1750) for statutory texts

```
>table (CONSTRUCTION, DatS:POSITION)
```

	no:POST	no:PRE	yes:POST	yes:PRE
APiCs	12	10	12	33
NPiCs	28	31	44	113

Pearson's  $\chi^2$  test.

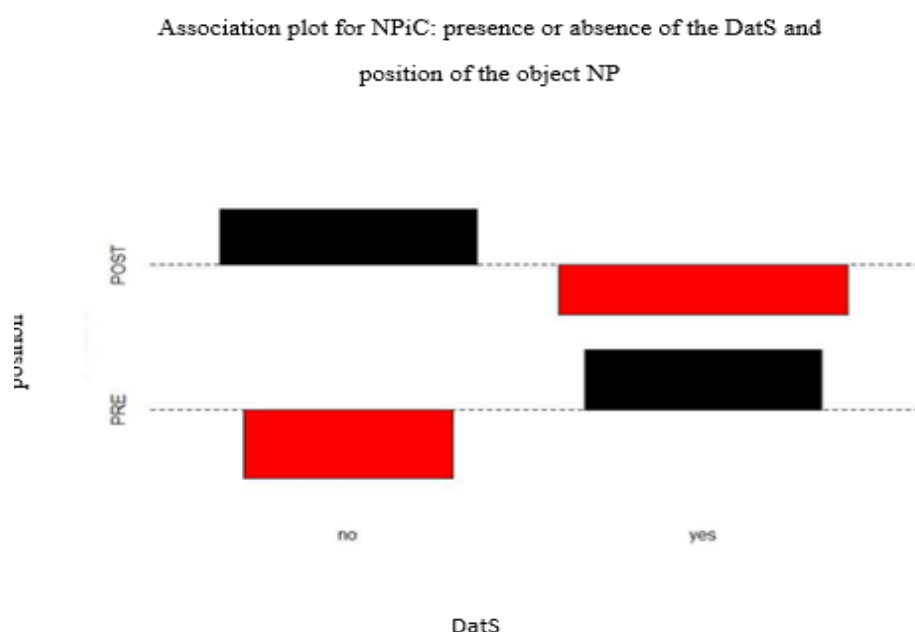
Data: table (CONSTRUCTION, POSITION)

X-squared = 3.6448, df = 1, *p* value = 0.05625

Data: table (CONSTRUCTION, DatS)

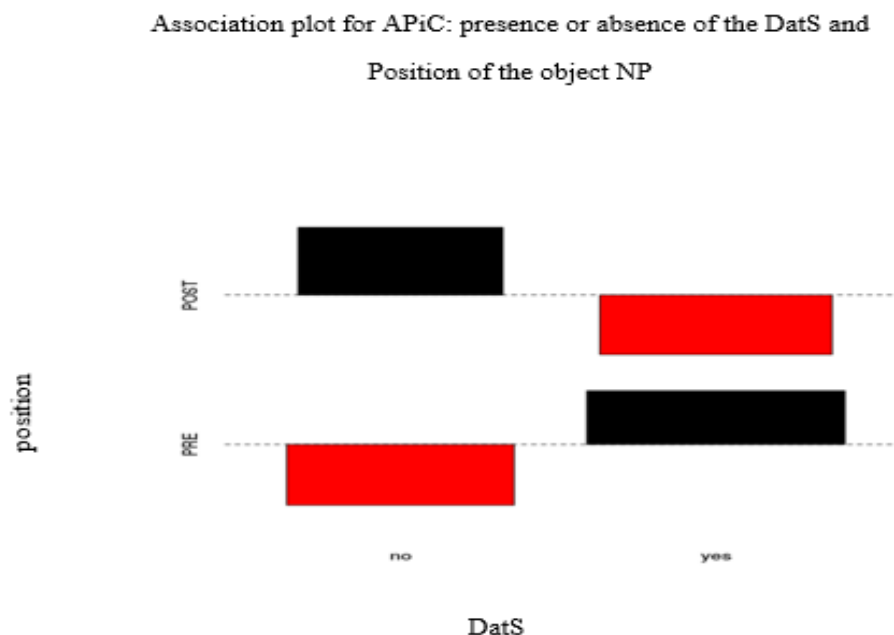
X-squared = 0.46674, df = 1,  $p$  value = 0.4945

Comment: These results demonstrate that, according to the data frame for the Middle Russian period, the logistic regression model fits the data well, but the regression coefficients indicate a change in the significance effect of the individual predictor variables (presence or absence of DatS and word order on the outcome (construction: NPiC or APiC). The above results show that the  $p$  values for each of the two factors have different effects and in contrast to the Old Russian period, the preverbal position of the nominative argument to the infinitive is significant ( $p$  value=0.05), but the presence or absence of DatS is insignificant ( $p$  value = 0.4). It seems that the choice of nominative object instead of the accusative follows structural features such as a marked preverbal position (not neutral SVO word order) of the noun that could indicate a process of reanalysis of the NPiC by analogy. Again, the correlation between the choice of PiC and those two factors can be illustrated as follows (Figure 22):



**Figure 22** Association plot for NPiC (Middle Russian).

The following association plot (Figure 23) visualizes the relation between the choice of the APiC and the two factors (DatS and pre - or postverbal position) for the data frame of the Middle Russian period.



**Figure 23** Association plot for APiC (Middle Russian).

Comment: The above association plots for NPiCs (NUMBER) and APiCs from the data frame for the Middle Russian period show an interesting correlation between the word order and the choice of construction, as both APiCs and NPiCs prefer to appear in the preverbal position independent of the presence or absence of DaTs.

Finally, as for Sample II (Middle Russian) the results of the  $\chi^2$  test showed a clear significance of the preverbal word order and a lesser significance of the presence of DatS, I calculated Cramer's value in R in order to moderate the effect size of this factor; this yielded the following results, which are small, but still reportable:

```
sqrt(chisq.test(table(CONSTRUCTION, POSITION), correct=FALSE)$statistic/sum(table(CONSTRUCTION, POSITION))*(min(dim(table(CONSTRUCTION, POSITION)))-1))
```

X-squared **0.1209863**

CONSTR1    POST    PRE

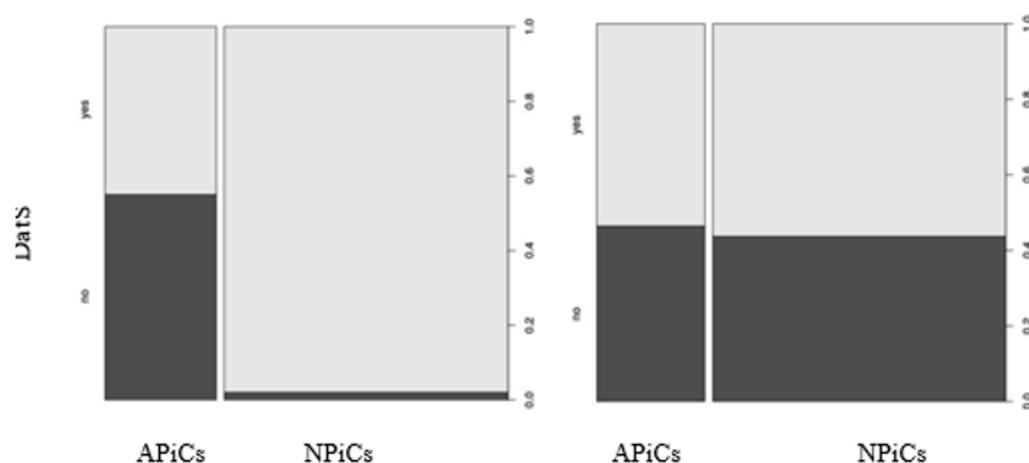


AcI 20.91566 35.08434

NcI 72.08434 120.91566

Comment: Cramer's value shows that the significance of the effect of the word order on the choice of NPiC can still be documented, even though the effect size is small ( $= 0.1$ ).

As a statistically relevant change has been observed in the significance of the presence or absence of DatS during two time periods (Old and Middle Russian), this change can also be graphically illustrated with a plot (Figure 24) in which the correlation between the choice of construction and the presence or absence of DatS can be compared:



**Figure 24** Plot for PiCs depending on the presence or absence of the DatS in Old Russian (left) and Middle Russian (right)

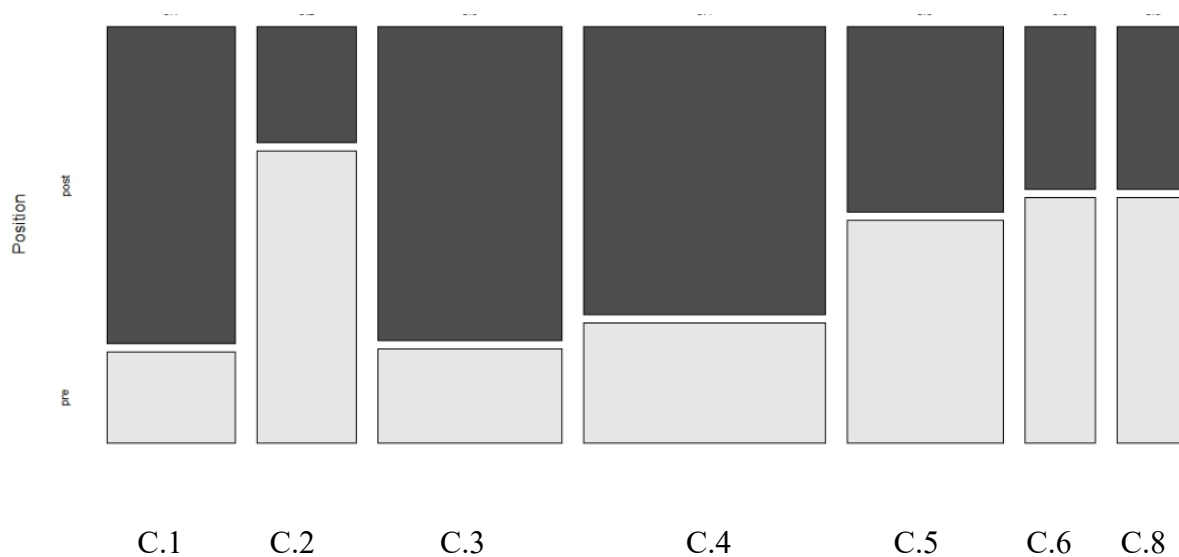
In order to obtain an initial idea concerning the data structure for the PiCs and SeCs, the contingency tables were constructed for different constructional types of SeC and both PiCs (y-axes) according to each of the two considered factors, that is, the pre- or postverbal position of the object (y-axis) in the first plot (Figure 25) and the presence or absence of DatS (also on the y-axis) in the second plot (Figure 26) for the data frame of the Old Russian period. This data frame contains 307 instances of SeC and 63 instances of PiCs. For this analysis, only statutory

texts were considered; hybrid texts will be analyzed separately in the next section:



**Figure 25** Plot for different types of construction depending on the presence or absence of DatS in the Old Russian period.

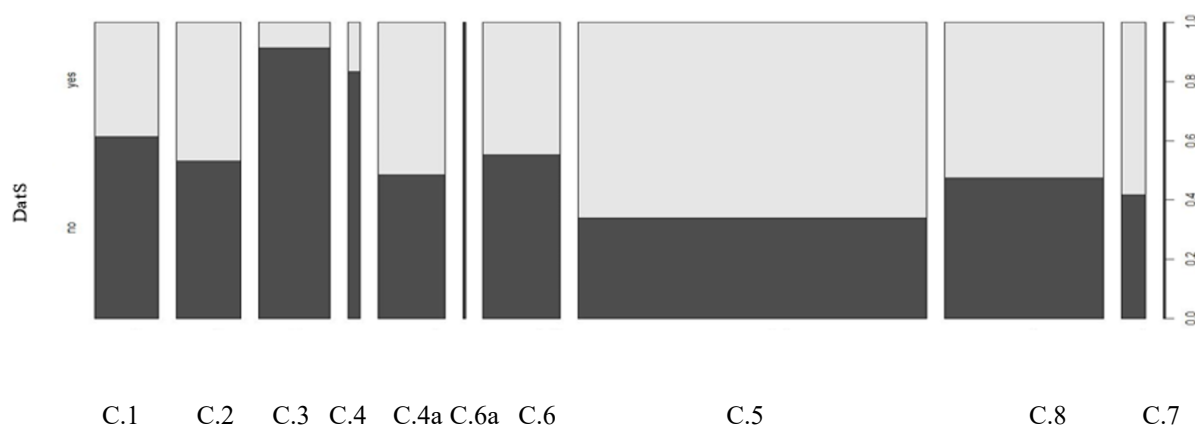
Abbreviations: “post”/“pre” = post- or pre-verbal position of the noun in the object position;  
 C.1 = APiCs, C.2 = ASeCs-1, C.3 = A/NSeCs-1; C.4 = A/NPiCs C.5=ASeCs-2 , C.6=NSeCs-1  
 C.7 =NSeCs-2, C.8 = NPiCs.



**Figure 26** Plot for different types of construction depending on the pre- or post-verbal position of the object NP in the Old Russian period.

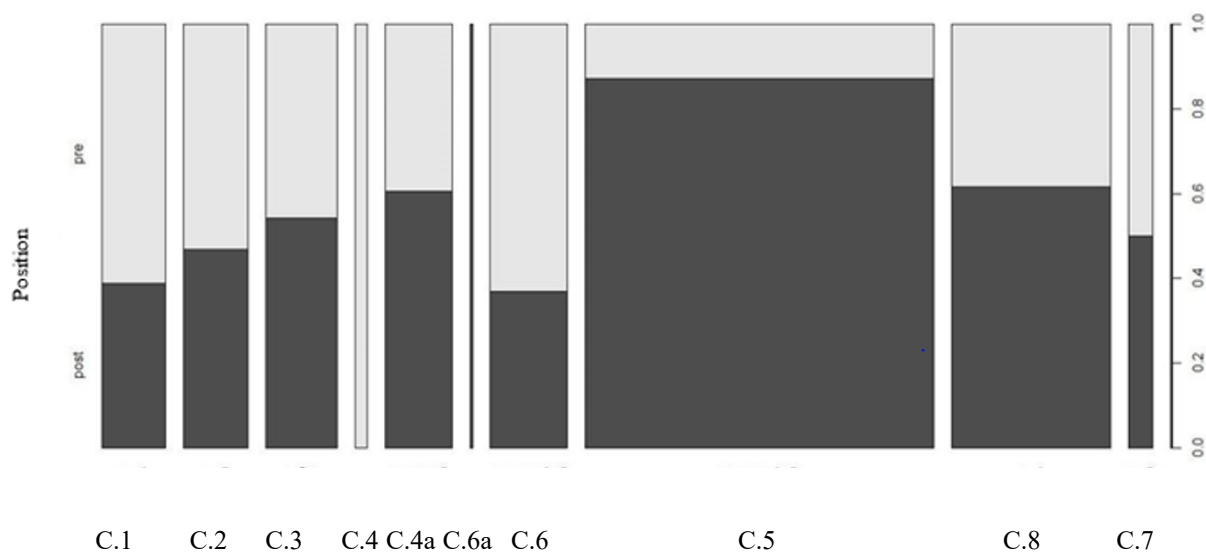
Abbreviations: “post”/“pre” = post- or pre-verbal position of the noun in the object position;  
 C.1 = APiC, C.2 = ASeCs-1, C.3 = A/NSeC-1; C.4 = A/NPiCs, C.5=ASeCs-2, C.6=NSeCs-2,  
 C.8= NPiCs.

The same analysis was done for the Middle Russian period. The data frame for Middle Russian contains 1104 instances for SeC and 283 for PiCs only from statutory texts.



**Figure 27** Plot for different types of constructions depending on the presence or absence of DaTS in the Middle Russian period.

Abbreviations: “no”/“yes” = presence/absence of the DaTS; C.1 = APiC, C.2 = ASeCs-1, C.3 = A/NSeC-1; C.4 = A/NPiCs(singular), C.4a = A/NPiCs(plural), C.5=ASeCs-2, C.6=NSeCs-2(singular), C.6=NSeCs-2(plural), C.7 = NSeCs-2, C.8= NPiCs.



**Figure 28** Plot for different types of construction depending on the pre- or postverbal position of the object NP in the Middle Russian period.

Abbreviations: “post”/ “pre” = post- or pre-verbal position of the noun in the object position; C.1 = APiC, C.2 = ASeCs-1, C.3 = A/NSeC-1; C.4 = A/NPiCs(singular), C.4a =

A/NPiCs(plural), C.5=ASeCs-2, C.6=NSeCs-2(singular), C.6=NSeCs-2(plural), C.7 = NSeCs-2, C.8= NPiCs.

Comment: The above plots for the SeCs and PiCs (Fig. 25 – 28) demonstrate that there is also a preference in the use of the noncanonical nominative versus. canonical accusative object depending on the word order and absence or presence of DatS. The plots show an interesting connection between the NPiCs and constructions including nouns in the masculine or neuter and an independent infinitive: both prefer the preverbal position of the nominative argument and occur in the presence of DatS. Most constructions with an accusative object prefer the absence of DatS and a postverbal position. The situation seems to have rapidly changed in the Middle Russian period, during which the nominative marked object prefers to stay in the postverbal position in almost all types of construction co-occurring with DatS. For the accusative constructions, the decline of the proportion of the accusative objects with a preverbal position is established. But the use of DatS in the accusative construction variant also declines and is at 60% / 40%.

#### **5.4. The relation between the choice of construction and two factors for PiCs and SeCs in hybrid texts**

As the relations in the hybrid texts with respect to the two factors and the choice of construction could have been driven also by “subjective” factors, I analyzed them separately. The hybrid texts contain 1360 SeCs and 542 PiCs for the Old and Middle Russian periods. The analysis procedure was the same as for the PiCs and SeCs for the statutory texts. However, in the hybrid texts, it is sometimes difficult to identify ambiguous instances, which I therefore marked with “unclear” and counted separately in the analysis. The names of texts in the titles of the graphs have been abbreviated and associated with the full name reported in the list of abbreviations or in the previous sections. Other texts have also been analyzed (not all of them, but selected collections of documents from the statutory text types); the results are shown in the appendix. The main idea is to give an overview of the tendencies and preferences in the use of PiCs and SeCs in hybrid texts from the Old and Middle Russian periods. Most of those documents have already been discussed separately from each other in various works, from which one can only get an idea of the distribution of NPiCs. Nonetheless, there has been no specific investigation of the relative distribution of the nominative with respect to the accusative in such constructions

(NPiCs vs. APiCs or NSeCs vs. ASeCs). The text examples with some comments may be found in the Appendix

In the results of the  $\chi^2$  test and in plot abbreviations for different construction types the following means:

C.1 = APiCs, C.2 = ASeCs-1, C.3 = A/NSeCs-1; C.4 = A/NPiCs; C.5=ASeCs-2 , C.6=NSeCs-1 C.7 =NSeCs-2 , C.8 = NPiCs.

Abbreviations: “no”/ “yes” = presence/ absence of the DatS; “pre”/“post” = pre- or postverbal position of the noun in the object position.

The first text analyzed is the *Voprošanie Kirikovo*. (VK) [The Questions of Kirik].

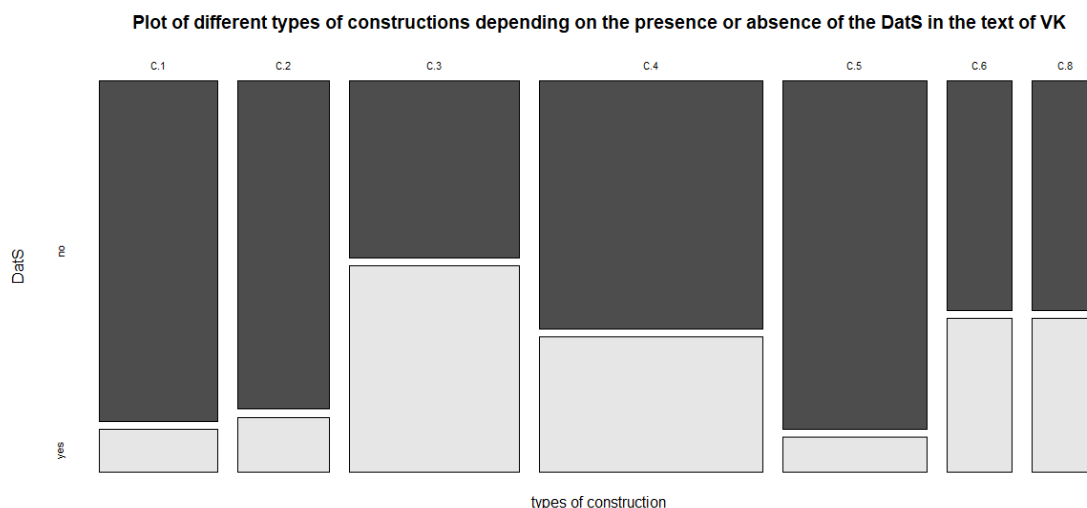
It contains 67 and seven observed instances of SeCs and PiCs, respectively, and has 14 levels:

```
> table(kirik$ds, kirik$toc)
```

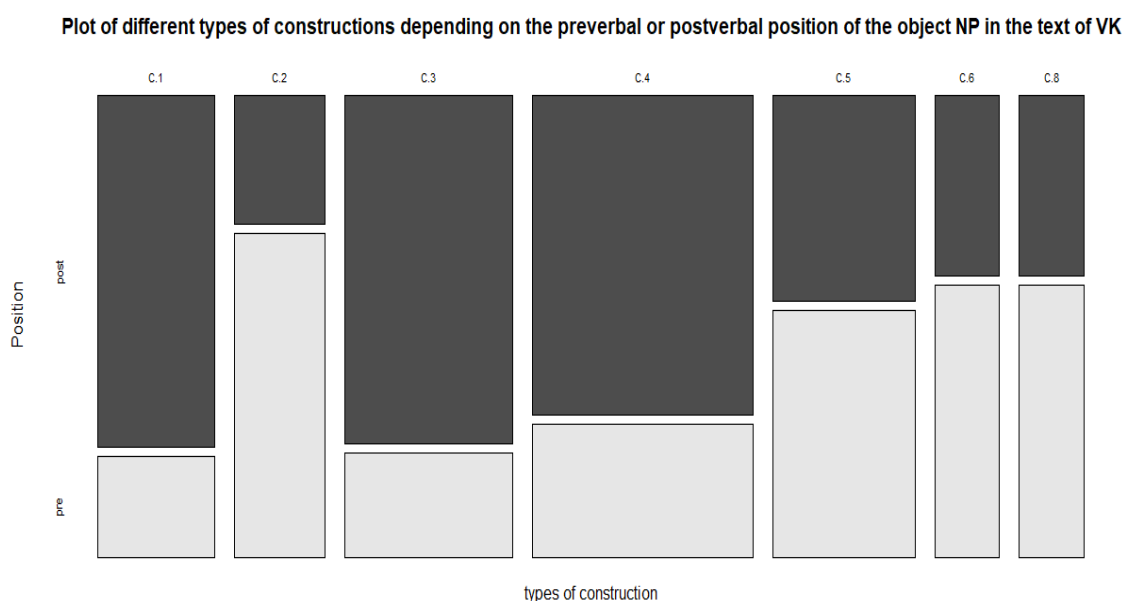
	C.1	C.2	C.3	C.4	C.5	C.6	C.7	C.8
no	8	6	6	11	10	3	0	3
yes	1	1	7	6	1	2	0	2

```
> table(kirik$pos, kirik$toc)
```

	C.1	C.2	C.3	C.4	C.5	C.6	C.7	C.8
post	7	2	10	12	5	2	0	2
pre	2	5	3	5	6	3	0	3



**Figure 29** Different types of construction depending on the presence or absence of the DatS.



**Figure 30** Different types of construction depending on the pre- or postverbal position of the object NP.

Comment: The above plot (Figure 29) shows that this text includes all types of constructions of interest with exception of C.7 (or NSeCs-2) and has generally more examples for constructions with accusative rather than with nominative (see width of the columns). From the data, one can identify a clear predominance for the absence of the DatS (dark area) especially for C.1, C.2, C.5; only for C.3 is there a preference for the presence of DatS (light area). However, comparing APiCs (C.1) and NPiCs (C.8), one can clearly ascertain a preference for the absence of DatS

with the accusative case, a trend that can be also seen in the case of dependent infinitives, as in the comparison of ASeC-1 (C.2) and NSeCs-1 (C.6). The second plot (Figure 30) demonstrates that with the accusative case, PiCs prefer a postverbal position (C.1) of the object NP, whereas SeCs prefer a preverbal position (C.2 and C.5). For the constructions with nominative, both PiCS (C.8) and SeCs (C.6) show a slight preference for the preverbal position. More detailed information about the distribution of NPiCs and APiCs and their use in different copies of VK with concrete examples can be found in Nikolaeva (2012).

*Sudebnik 1497 goda. S. I. Štamm* (Sud. St. 1497) [Code of Law of 1497]

This contains 75 and eight observed instances of SeCs and PiCs, respectively, and has 16 levels:

Results of the  $\chi^2$  analysis for this text:

```
> table(sudebnik$ds, sudebnik$toc)
```

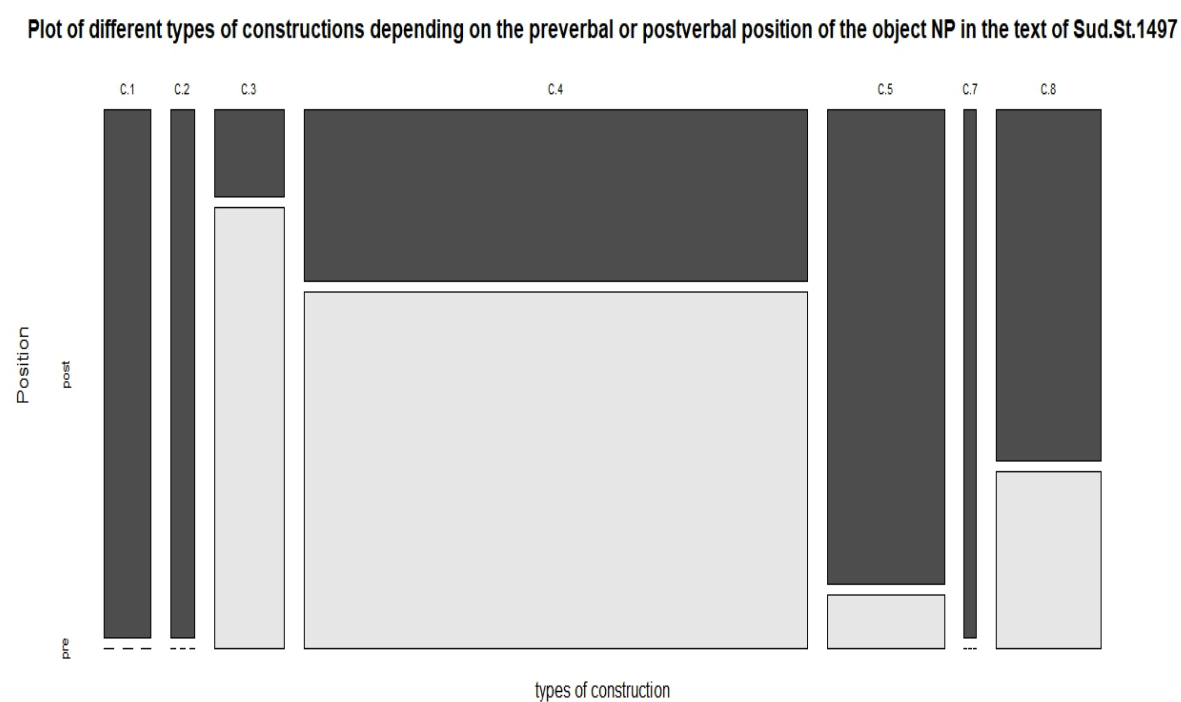
	C.1	C.2	C.3	C.4	C.5	C.7	C.8
no	2	1	3	7	5	1	0
yes	2	1	3	36	5	0	9

```
> table(sudebnik$pos, sudebnik$toc)
```

	C.1	C.2	C.3	C.4	C.5	C.7	C.8
Post	4	2	1	14	9	1	6
pre	0	0	5	29	1	0	3



**Figure 31** Different types of construction depending on the presence or absence of the DatS in Sudebnik 1497.



**Figure 32** Different types of construction depending on the pre- or postverbal position of the object NP in Sudebnik 1497.



Comment: This text includes all types of PiC and SeC under consideration and has in general a greater number of examples. As the first plot (Figure 31) shows, this text has more examples of NPiCs (C.8), A/NPiCs (C.4), and ASeCs (C.5). If we compare the use of PiCs according to the presence or absence of the DatS, it is clear that NPiCs are used mostly with DaTs and APiCs almost equally with or without (the same is true for ASeCs-1 and A/NSeCs-2 and also for NSeCs-1). On the second plot regarding to this text (Figure 32) shows an interesting trend, most construction types prefer the postverbal position of the object NP, with the exception of A/NSecS-1 and A/NPiCs-1, which prefer the preverbal position of the object NP.

*Lunnik. Primety po dnjam lunny (Lun.) [Lunar calendar]*

This contains 20 and four observed instances of SeCs and PiCs, respectively, and has eight levels:

Results of the  $\chi^2$  analysis for this text:

```
> table(lunnik$pos, lunnik$toc)
```

	C.1	C.3	C.4	C.8
Post	1	1	3	0
Pre	0	0	9	6

```
> table(lunnik$ds, lunnik$toc)
```

	C.1	C.3	C.4	C.8
no	1	1	12	5
yes	0	0	0	1



**Figure 33** Different types of construction depending on the presence or absence of the DatS in *Lunnik*.



**Figure 34** Different types of construction depending on the pre- or postverbal position of the object NP in *Lunnik*.

Comment: Only four different types of construction were found in this small text –APiCs, A/NSeCs-1, A/NPiCs, and NPiCs; however, as we can see, the number of nominative

constructions is higher than for the accusative. The first plot above (Figure 34) shows that all constructions are used without DaTs (the only exception is the NPiCs C.8), this fact could be explained by the pragmatic nature of this text, which refers to generic or nonspecific addressees (referents). The second plot (Figure 35) demonstrates a difference in the use of APiCs and ASeCs vs. NPiCs according to the pre- or postverbal position of the object NP. In fact, NPiCs (C.8) show a clear preference for the preverbal position, whereas for APiCs (C.1), the object NP is always found in the postverbal position.

*Sobornoe Uloženie 1649 goda* (Sob. Ul.) [Code of law of 1649]

This contains 437 observed examples of SeCs and eight observed instances of PiCs and has 16 levels:

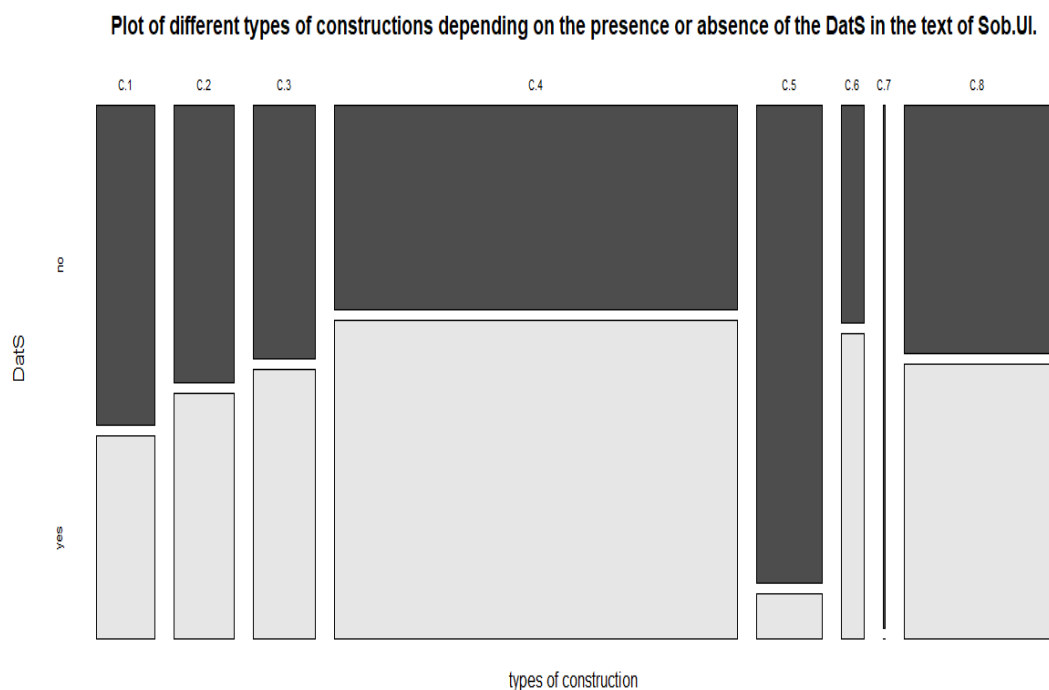
Results of the  $\chi^2$  analysis for this text:

```
> table(ulozenie$ds, ulozenie$toc)
```

	C.1	C.2	C.3	C.4	C.5	C.6	C.7	C.8
no	19	17	16	84	32	5	1	37
yes	12	15	17	131	3	7	0	41

```
> table(ulozenie$pos, ulozenie$toc)
```

	C.1	C.2	C.3	C.4	C.5	C.6	C.7	C.8
post	12	15	20	163	19	6	1	48
pre	19	17	13	52	16	6	0	30



**Figure 35** Different types of construction depending on the presence or absence of the DatS in Uloženie.



**Figure 36** Different types of construction depending on the pre- or postverbal position of the object NP in Uloženie.

Comment: This text includes all types of PiC and SeC under consideration. The above plot (Figure 35) shows that if the APiCs (C.1) and ASeCs (C.2 and C.5) are used mostly without DaTs, the NPiCs (C.8) and NSeCs (C.6 and C.7), in contrast, have a fairly equal use with respect to DatS. The next figure (Figure 36) shows surprising results as constructions with the nominative tend to have a postverbal object NP, whereas constructions with accusative show the opposite tendency (preverbally placed object NP).

*Knjiga o skudosti i bogatstve, I.T. Posoškov. (Pos.)*

[The book about poverty and wealth written by I.T. Posoškov]

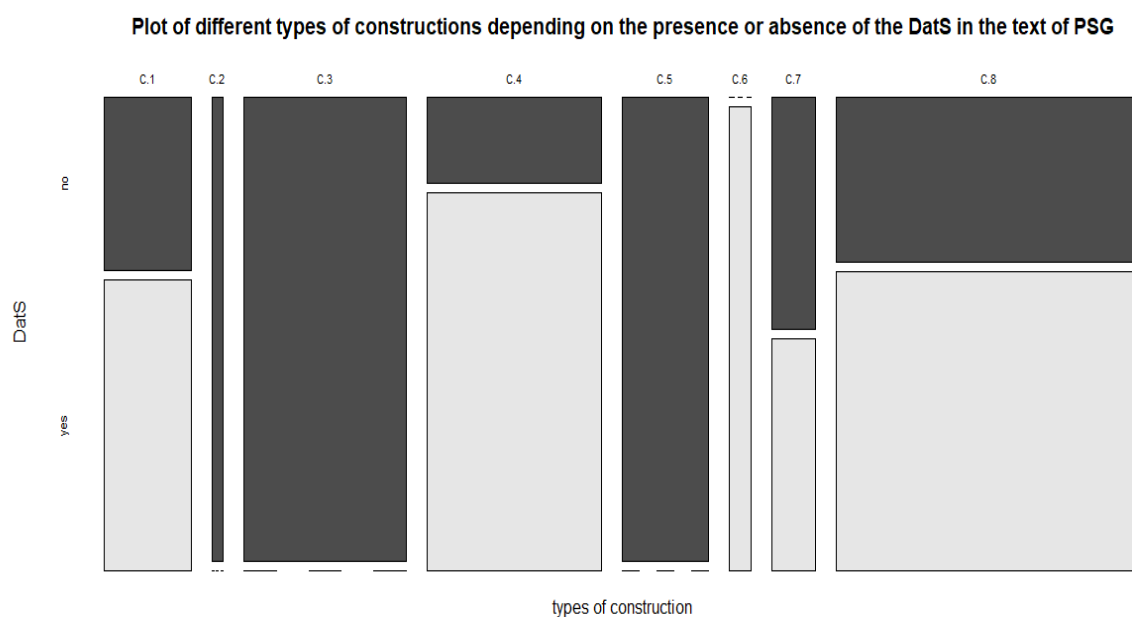
This contains 568 observed examples of SeCs, eight observed instances of PiCs, and has 16 levels: Results of the  $\chi^2$  analysis for this text:

```
> table(pososhkov$ds, pososhkov$toc)
```

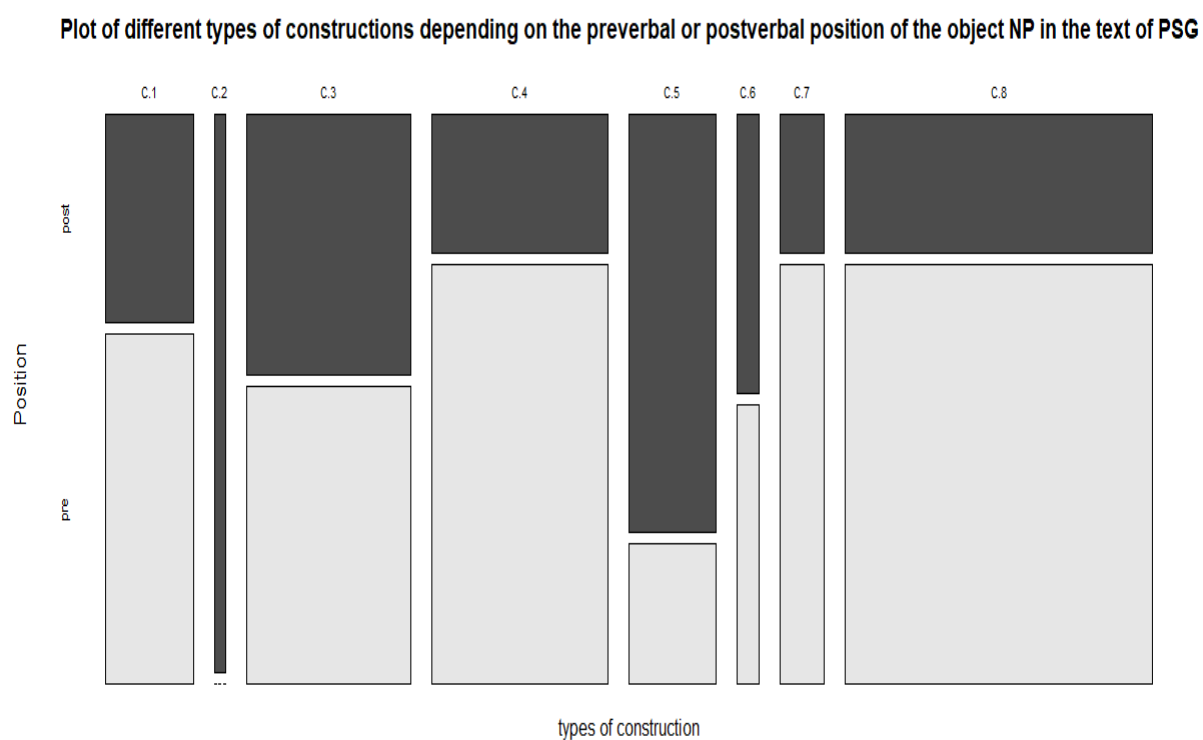
	C.1	C.2	C.3	C.4	C.5	C.6	C.7	C.8
no	25	24	27	119	118	12	2	78
yes	17	8	23	61	6	14	0	34

```
> table(pososhkov$pos, pososhkov$toc)
```

	C.1	C.2	C.3	C.4	C.5	C.6	C.7	C.8
post	22	11	22	91	62	8	1	55
pre	20	21	28	89	62	18	1	57



**Figure 37** Different types of construction depending on the presence or absence of the DatS in Pos.



**Figure 38** Different types of construction depending on the pre- or postverbal position of the object NP in Pos.

Comment: This text includes all types of PiC and SeC we are interest in. In this text, the number of constructions with the nominative is much bigger than that with the accusative. However, if we look at the first plot (Figure 37) and compare the use of APiCs and NPiCs according to the presence or absence of the DaTs, there are no significant differences; both variants show a slight preference for the presence of DaTs. One can also see that in most SeC constructions (both with the accusative and nominative), the DaT is absent. The next figure (Figure 38) shows that in most constructions the preverbal position of the object NP is preferred to the postverbal position. The latter is more frequent only for ASeCs-2 (C.5). Therefore, it seems that, in this text, the use of nominative and accusative object constructions is not strictly differentiated. (This fact also confirms my observations made in the previous section)

*Akty chozjajstva bojarina B. I. Morozova (Mor.)*

[Treaty of the household of the boyar B. I. Morozov]

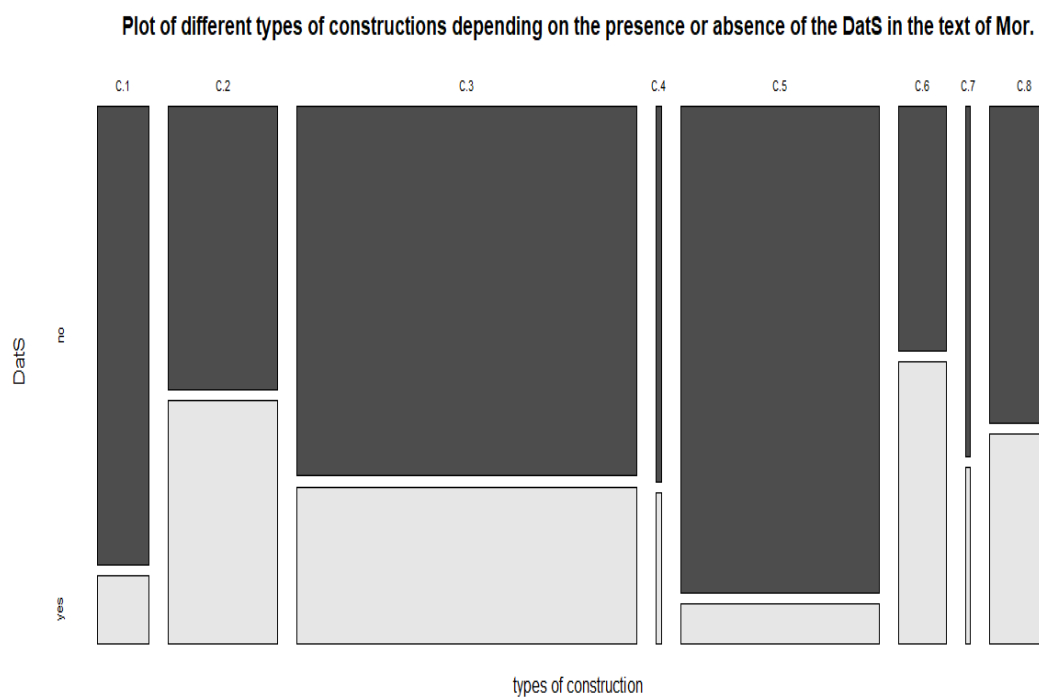
This contains 997 observed examples of SeCs, 8 observed instances of PiCs, and has 16 levels: Results of the  $\chi^2$  analysis for this text:

```
> table(morozov$ds, morozov$toc)
```

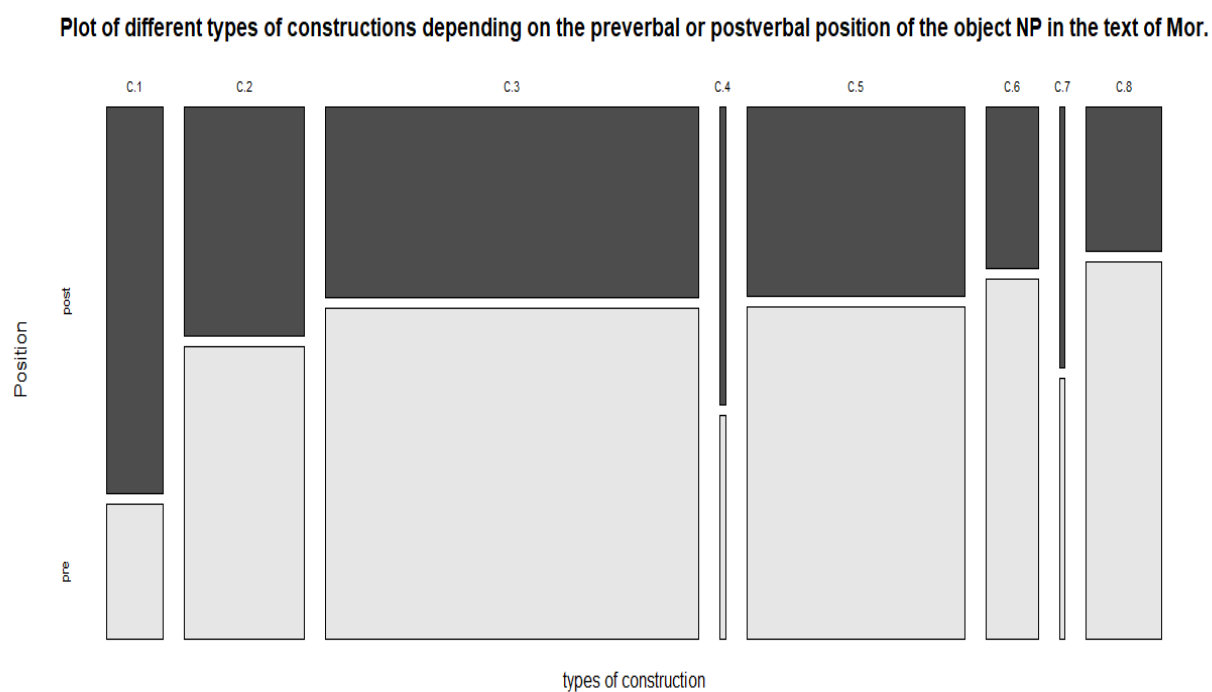
	C.1	C.2	C.3	C.4	C.5	C.6	C.7	C.8
no	54	71	288	5	221	27	4	50
yes	8	61	122	2	18	31	2	33

```
> table(morozov$pos, morozov$toc)
```

	C.1	C.2	C.3	C.4	C.5	C.6	C.7	C.8
post	46	58	150	4	87	18	3	23
pre	16	74	260	3	152	40	3	60



**Figure 39** Different types of construction depending on the presence or absence of the DatS in Morozov.



**Figure 40** Different types of construction depending on the pre- or postverbal position of the object NP in Morozov.



Comment: This text includes all types of PiC and SeC that we are interested in. The number of constructions with the nominative is much smaller than with the accusative. The first plot (Figure 39) shows a clear trend for all types of construction to be used without DaTs (this is also true for the NPiCs). The second figure (Figure 40) shows that the distribution of nominative versus accusative constructions differs according to the pre- or postverbal position of the object NP: the NPiCs (C.8) and NSeCs-1 (C.6) together with ASeCs-1 (C.2) and ASeCs-2 (C.5) are used with an object NP in the preverbal position, whereas APiCs (C.1) are mostly used with an object NP in the postverbal position.

## 5.5. The rise of secondary constructions

As already discussed in Chapters 2 and 3, the disappearance of NPiCs and the way they vary with APiCs is closely related to three other developments in the history of Russian: the emergence of the category of animacy, the specification of the accusative case marking for direct objects, and the parallel development and specification of modal constructions. The traces of these processes are visible in the crosscontamination between PiCs and SeCs in the phenomenon of noncanonical object marking. As the main interest of the present study is the analysis of PiCs, I shall just briefly outline the main conclusions regarding the issue of the crosscontamination between NPiCs and SeCs by testing Kryś'ko's hypothesis.

Kryś'ko (1994) supposed that the disappearance of constructions with a noncanonical nominative object was closely connected with the establishment of direct object marking with the accusative. According to him, the direct object meaning of the accusative is a later development that arose from an adverbial–circumstantial function of the accusative and cannot be dated to earlier than the end of the 14<sup>th</sup> or the beginning of the 15<sup>th</sup> c. If this were the case, then the data should show this correlation in the decline of the use of PiCs and the rise of SeCs, in which the use of the accusative was then usual behavior. However, in previous works, the use of SeCs was not analyzed in detail, and there are different interpretations of their origin. Larin (1963), for example, proposed that the nominative was originally found with an imperative or with finite verbs, but most authors disagreed with this interpretation. In traditional studies, it was assumed that, originally, noncanonical nominative marking was used with independent infinitives (PiCs) and later spread to other constructional types (SeCs) until NPiCs were completely replaced by APiCs and ASeCs. It is, however, not clear when exactly this happened or what impact the accusative constructions could have had on the use of the NPiCs

and NSeCs that have also been found in all those types. Moreover, as several examples with a nominative and a dependent infinitive, with a gerund (SeCs-1), or an imperative (SeCs-2) have also been found in the earliest Old Russian sources (cf. Dunn 1978, Zaliznjak 2004, Mendoza 2008), it seems that another explanation is possible: that is, that noncanonical nominative marking was actually possible in all kinds of sentences, and was not restricted only to sentences with an independent infinitive (PiCs). This could have happened in parallel to the establishment of the accusative direct object marking (starting in the SeCs and then also including the PiCs), until the nominative was completely replaced by APiCs and ASeCs.

The table (23) below once more lists all types of SeC (for a full description, see Chapter 2) that were annotated in CHaRLi and used for further analysis:

**Table 23** List of constructions.

**Secondary construction Example:  
(SeCs)**

<b>ASeCs-1</b>	<i>Povelŕ (mod.) soveršiti (inf.) večernjuju službu (acc.)</i>
<b>NSeCs-1</b>	<i>dostoit' (mod.) li popou svojej ženě molitva (nom.) tvoriti (inf.)</i>
<b>ASeCs-2</b>	<i>Zemlju (acc.) udobrjaetŕ (finite verb)</i>
<b>NSeCs-2</b>	<i>a ta zemlja (nom.) čistil (finite verb) Ivan Brylkin</i>
<b>A/NSeCs-1</b>	<i>i o sem dostoit (mod.) vpred' čin i zakon (acc./nom) ustaviti (inf.)</i>

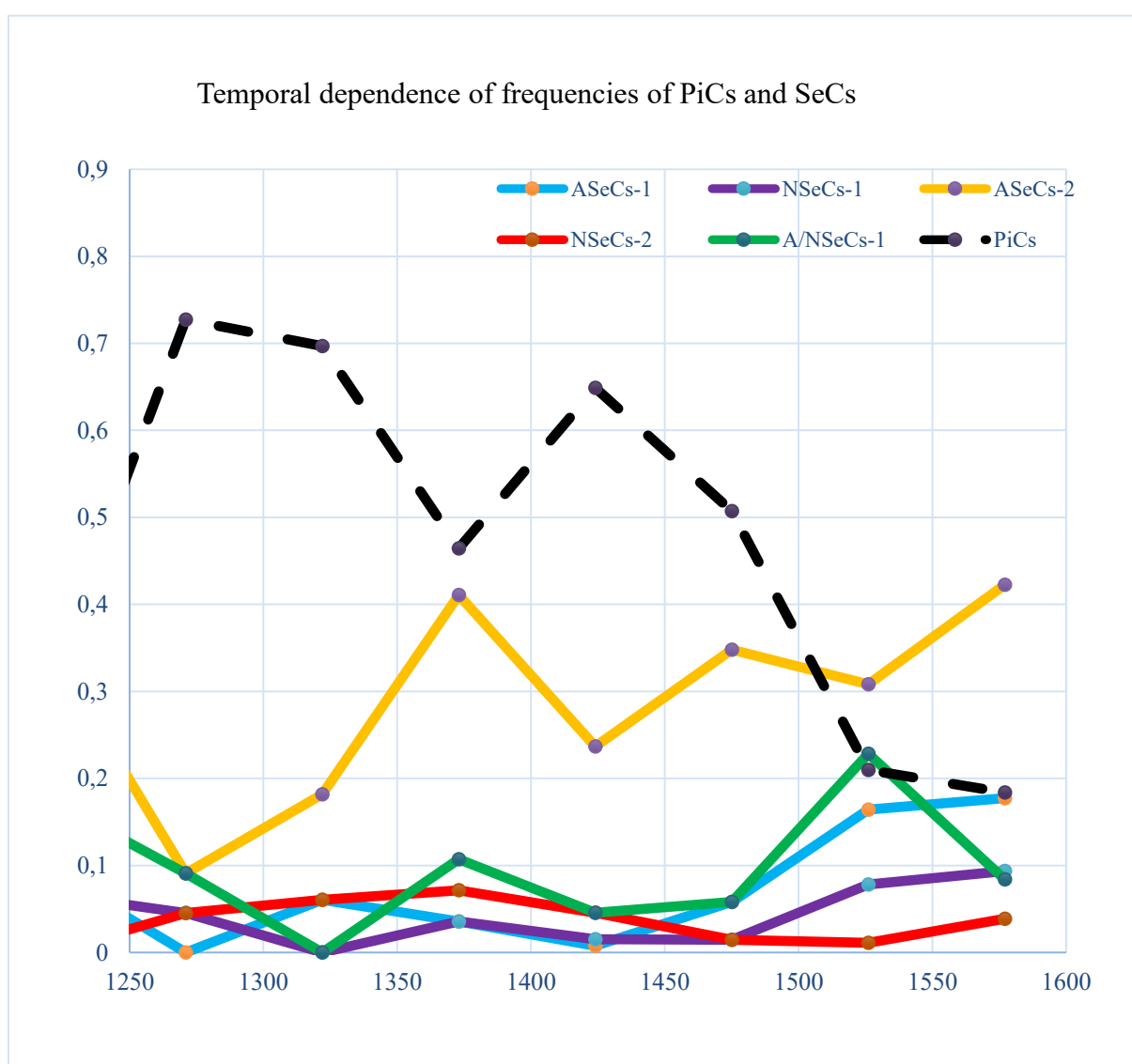
In order to get a general picture of the distribution (table 24) and development of SeCs and PiCs over time, the distribution of all these types was analyzed for two periods (Old and Middle Russian) to see if any changes could be identified. As the use of PiCs supposedly changed at the end of the 14<sup>th</sup> c. and the beginning of the 15<sup>th</sup> c., the use of SeCs would also have to be located in this period.

**Table 24** Distribution of different types of construction, all samples.

Year / Type of construction	ASeCs-1	NSeCs-1	ASeCs-2	NSeCs-2	A/NSeCs-1	PiCs
1220	0.09	0.07	0.35	0.00	0.18	0.31
1271	0.00	0.05	0.09	0.05	0.09	0.73
1322	0.06	0.00	0.18	0.06	0.00	0.70

1373	0.04	0.04	0.41	0.07	0.11	0.46
1424	0.01	0.02	0.24	0.05	0.05	0.65
1475	0.06	0.01	0.35	0.01	0.06	0.51
1526	0.16	0.08	0.31	0.01	0.23	0.21
1577	0.18	0.09	0.42	0.04	0.08	0.18

I calculated the percentage of occurrences for each constructional type over even time segments of 50 years (1250 – 1550 on the *x*-axis) and their frequency in the sample for the Old and Middle Russian statutory texts (*y*-axis).

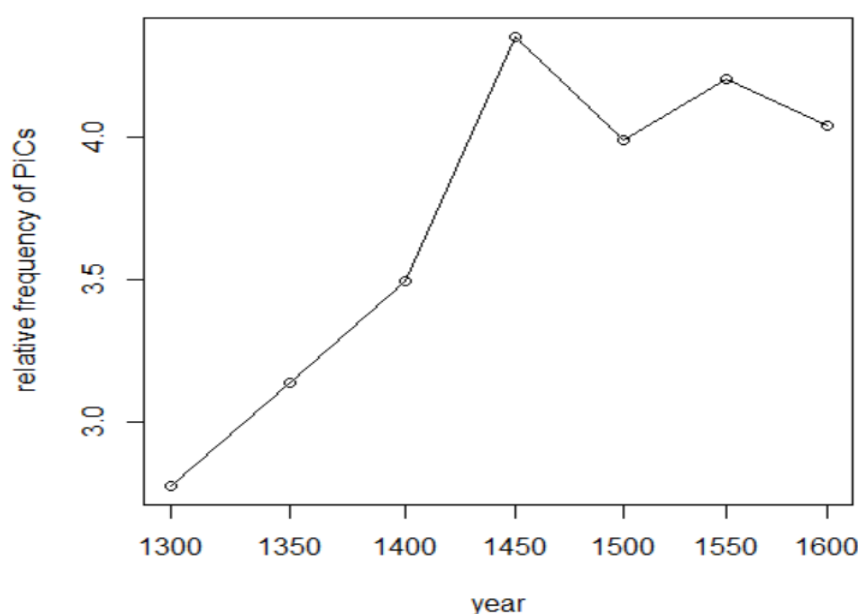


**Figure 41** Temporal distribution of different types of constructions, all samples.

The result is the rather complex graph in Figure (41). This graph (Fig. 41) shows that five lines form two clusters: 1) the constructions with a dependent infinitive (SeCs-1 in my classification): blue = ASeCs-1, violet = NSeCs-1, green = N/ASeCs-1; 2) the constructions with a finite verb (SeCs-2 in my classification): yellow = ASeCs-2 and red = NSeCs-2; and separately PiCs (NPiCs and APiCs) = dashed black line. The two clusters are different in their nature. As expected, the use of the accusative object with a finite verb (ASeCs-2 = yellow) rapidly increased from the middle of the 14<sup>th</sup> century. This fact correlates with the assumption in Kryśko (2006) that the accusative case marking of the direct object in the history of Russian cannot be dated to earlier than the end of the 14<sup>th</sup> c. The “unusual” use of the nominative object with a finite verb (NSeCs-2 = red), which is attested to especially in the earlier texts, declined (in relation) exactly from that period when the ASeCs-2 began to appear frequently.<sup>73</sup> The second group of constructions with a dependent infinitive shows differences and similarities. ASeCs-1 slowly start to increase from 1425, whereas the NSeCs-1 only start to increase from the middle of the 15<sup>th</sup> century. However, from 1470 to 1475, a parallel development can be seen in the lines, so both constructions spread and rose in their frequency. This also confirms that the modal constructions in the history of Russian (in my classification it will be a SeCs-1 constructions) developed later from the PiCs (with independent infinitive constructions). The results of this analysis suggest that, to a certain degree, the rate of change for all surface contexts reflects an underlying parameter change: in this case, the use of the independent and dependent modal constructions. In this graph, I also plotted the decreasing trend of the PiCs (dashed black line). It can be seen that the decrease of PiCs corresponds to the general increase in the use of SeCs. To better visualize this trend and highlight the different temporal stages, I calculated the decrease of PiCs (Figure 41) and the increase in the use of the SeCs-1 (with a dependent infinitive, Figure 42) according to the data from CHaRLi. The first graph shows that, when the proportion of PiCs is plotted against time, there is a clear decreasing trend starting from the year 1450.

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<sup>73</sup>However, the use of the nominative with a finite verb was not common. Examination of the test occurrences suggested that especially in the later period, the majority of these examples occur in the so-called “nominative in list”, where at least one of the objects could appear in the accusative.



**Figure 42** Relative frequency of PiCs, all samples.

Figure (42) shows clearly that there is no significant change in the use of constructions in the dependent infinitive during the period from approx. 1245 to 1500. After 1500, the use of the dependent infinitive constructions started to rise. This result correlates with the assumption in Dunn (1978: 242) that the use of noncanonical nominative marking in SeCs was a gradual process of (partial) replacement by the accusative beginning from the 16<sup>th</sup> to the 17<sup>th</sup> centuries. However, a closer look at the data yields some interesting observations. The figure shows that the rate at which SeCs replace the “older” PiCs is the same in all contexts. These findings support the general claim that linguistic changes tend to follow an S-shaped curve (cf. Bailey (1973) and Kroch’s (1994) Constant Rate Effect). However, the development of NPiCs and APiCs and their structurally similar patterns show some affinities (a positive trend), but also differ from each other (i.e., the rate of change is different).

Within different types of SeC, a change in the use and different development tendencies can be identified.

Firstly, noncanonical nominative marking can already be observed in the earliest Old Russian texts (from the 12<sup>th</sup> – 13<sup>th</sup> c.) in all types of constructions, but the accusative was also found (to a lesser extent in the ASeCs-1, but regularly in the ASeCs-2 (with a finite verb)).

Secondly, although the accusative variants were used with more regularity than all other types of SeC, it seems that the use of NSeCs was not just random and possibly developed some regular patterns of use<sup>74</sup>. I will discuss some general tendencies according to the corpus data:

NSeCs-1 were not common, but seem to be restricted to specific contexts, especially in the later periods, by their modal semantics; in some cases, this can be explained with a syntactic or semantic analogy. This process was surely related to the rise of modal constructions in the history of Russian. The examples show that after several changes in modal infinitive constructions, a grammaticalization process took place as well as the development of case-marking strategies in direct object marking in Russian, etc. This is also a good illustration of the exploration of the effects of the change and the way in which different constructional patterns and processes can be compared, as I will point out now in a few general observations.

A closer look at the different types of SeCs-1 (a- and b-sub-types, cf. Chapter 2.1.3), that is, a) with an impersonal modal predicate verb (in the infinitive or a finite form) or its adverbial form such as in: *dostoit* 'it fits' or *dostoino* 'it is fitting'; *podobает (podobat')* 'it is befitting'; *можно (možno, močno, etc.)*; *(po)veleno (veleti)* 'it is ordered'; *vol'no* 'it is free', *nadobno (nadobně, nužno)* 'it is necessary'<sup>75</sup>, and b) with an impersonal verb: *lučitsja* 'it happened' and *dovedetsja (dovestisja)* 'to have an occasion', shows differences in their use in the Old and Middle Russian periods, which are certainly closely related to the development of the modal constructions as such. This correlates with the fact that the modal constructions with an independent infinitive, which at the beginning of their existence had a polyfunctional modal meaning and were used widely in Old Russian texts, started to be reanalyzed and were then replaced with modal constructions including modal words and an infinitive verb and a more specified meaning. Comparison of NSeCs-1 (a) and (b) shows that all the instances of subtype (b) are found in the Old Russian sources, whereas only some rare examples of subtype (a) occur in the Old Russian sources, most of them being in the Middle Russian texts. Moreover, the use of noncanonical nominative marking in different types of construction differs depending on their modal semantics. In the earlier texts (dating from the 12<sup>th</sup> to 14<sup>th</sup> c.), the use of NSeCs and ASeCs was restricted to specific modal predicates: for example, the nominative was often used with *vol'no*

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<sup>74</sup>It was not the purpose of this study to analyze in detail the distribution of different subtypes of SeC, but this could be a worthwhile issue for future research.

<sup>75</sup>Examples cf. Chapter 2.

‘it is free’ and *nadobno* (*nadobně, nužno*) ‘it is necessary’, and the accusative with *možno* ‘it is possible’. The use of these constructions was not restricted to text categories, but can be found in all kinds of texts, possibly with a slight preference for hybrid texts such as Sud., Sob. Ul., Mor., Pos. Moreover, the corpus evidence does not support the assumption in Filin (1972: 478) that in the Old Russian sources, NSeCs-1 were often used with *nadobno* (*nadobně, nužno*). Rather, this is valid for the dialectal material (in modern Russian), where most examples with a nominative in fact occur with this modal predicate, but not for the earliest period, in which the use of NSeCs-1a with these modal predicates is rare and has an optional character; more examples can be found in texts dating from the end of the 16<sup>th</sup> or 17<sup>th</sup> centuries (such as example (12) in Chapter 2). The use of NSeCs-1a became more restricted to the modal predicates *podobaet* ‘it is necessary’ (as in example (93)) or *veleno* ‘it is ordered’ as in (94) in the later sources dating from the 16<sup>th</sup> c.<sup>76</sup>.

(93) Pos. 17<sup>th</sup> c.:

<i>To</i>	<i>podobajet</i>	<i>emu</i>	<i>vo vsem [...]</i>	<i>dele</i>
this	benefit - MOD	he - DAT	in whole	case
<i>pravda</i>	<i>tvoriti</i>			
right - NOM.F.SG	to-do - INF			

‘And it is fitting for him to do right in this whole case.’

(94) Sob.Ul, 17<sup>th</sup> c.:

<i>A</i>	<i>veleno</i>	<i>im</i>	<i>služiti [...]</i>	<i>služba</i>
and	order - MOD	they - DAT	to serve - INF	service - NOM.F.SG

“And it is an order to them to perform the service.”

Therefore, it seems that in the Middle Russian period, especially in the later Middle Russian period (end of the 16<sup>th</sup> c.), the use of the constructions with noncanonical nominative marking with or without a modal predicate was differentiated with respect to the modal semantics that

<sup>76</sup>Although Dunn (1978) argues that in the later periods, the NSeCs-1 with *nadobne* ‘it is necessary’ were used most frequently, the text evidence from CHaRLi does not support this assumption.

these constructions were meant to express. NPICs were used only in order to express the semantics of necessity, and NSeCs-1a had an imperative or commanding meaning.

A third, more complicated explanation exists for the use of NSeCs-2a (with a finite verb): again, ASeCs-2 were more usual with a finite verb, but many examples with a nominative are found that cannot be interpreted as mere mistakes or an unrestricted application of noncanonical object marking. Most examples of NSeCs-2a have been found in the so-called “nominative in list” (cf. Chapter 2). The remaining examples could probably be explained as a general tendency in the later Middle Russian period, towards case variation in object marking that, for some verbs, yielded more than one possibility for marking the object with an accusative, a nominative case, or an accusative-genitive, etc. However, NSeCs-2a never became a frequent phenomenon.

The NSeCs-2b (with a gerund) have been attested to in the oldest sources and occur with increasingly less frequency in texts until the 17<sup>th</sup> century. The use and origin of this type have already been discussed in Timberlake (1974) and Dunn (1978). Timberlake (1974) used the fact that also a nominative occurred with a gerund to support his theory of the “object status” of the nominative. However, the corpus evidence, especially from the Old Russian period, and the observations in Dunn (for his analysis of *Russkaja Pravda* (RP) see Dunn 1978: 250) do not support this hypothesis, as the nominative was not found as an object of the gerund. There are several examples in which a nominative occurs with a gerund subordinated to an independent infinitive, as in example (95).

(95) Sob.Ul, 17<sup>th</sup> c.:

<i>i</i>		<i>u</i>	<i>togo</i>	<i>kto</i>		<i>takъ</i>	<i>oučinitʹ</i>
and		by	this	who		so	to-do-INF
<i>ta</i>		<i>čužaja</i>	<i>zemlja</i>			<i>vzjav</i>	<i>otdati</i>
this	-	foreign	-	land	-	take - GER	to-give - INF
NOM.F.SG		NOM.F.SG		NOM.F.SG			

“And it is to give the foreign land to him from whom this land was taken.”

Corpus analysis, however, confirms Dunn’s view that there is no textual evidence from the earliest Old Russian texts for NSeCs-2b with a gerund having been originally used with a nominative (as Timberlake 1974: 27-30 suggested). Moreover, because the accusative case was also found in the same texts and, comparing later Middle Russian texts and the distribution of



these types with a nominative or an accusative, the ASeCs-2b outnumber the NSeCs-2b. Most examples with a gerund subordinated to an independent infinitive in the later Middle Russian sources have been found with the accusative case, but there are also some examples with a nominative in texts dating from the 16<sup>th</sup> – 17<sup>th</sup> centuries. However interestingly, these examples were attested to mostly in hybrid texts such as Mor., Sob. Ul., Dom., and a few single instances also in statutory texts such as PDSK, Akty istor.

NSeCs-1c (with a passive participle with *-no/-to*) as in example (96) were not frequently used in the chancellery language; most examples have been found in the later Middle Russian texts and represent “agreeing passives” (Moser 1998).

(96) Mor. 17<sup>th</sup> c.:

<i>prislano</i>	<i>ko mne</i>	<i>tvoja</i>	<i>gosudareva [...]</i>	<i>gramota</i>
send - PTCP.	to me	your - NOM.F.SG	state- NOM.F.SG	writ - NOM.F.SG

‘Your state writ has been sent to me.’

This type was, however, strictly restricted, apparently more so by an external factor, and can be seen as a result of language contact between Middle Russian and Middle Ukrainian and Polish (for more details see Parkhomenko 2016).

The last type of NSeC-2 is sub-type (d) with an imperative verb. As discussed in Chapter 3, in some theories it was argued that the nominative was originally used with a gerund and an imperative in Old Russian (Larin 1963) as in the Finnic language<sup>77</sup>. However, only a few attestations of this type could be found in the corpus with a nominative (in NSG, Domostroj and some statutory documents) some of which were already cited in Chapter 2.2; other examples were cited in Dunn (1978) from the Birchbark documents, NBT and Domostroj.

Thus, it can be concluded that, firstly, in all types of SeC, ASeC occur in parallel to NSeCs and predominate throughout the history of their co-existence. Secondly, a closer inspection of the instances of NSeCs led me to the assumption that noncanonical nominative object marking was originally used in PiCs and it seems very probable that noncanonical nominative marking was

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<sup>77</sup>This fact was used to support the language contact theory of the origin of the NPiCs in Russian (Larin, 1963, Timberlake 1974).

not restricted to any type of construction. Although it does not only occur in types with an independent infinitive, nominative marking became restricted to specific constructional types very quickly due to different factors (internal: modal semantics, variation in the case marking by specific verbs and external: language contact situation), so that NSeCs can be interpreted as a secondary phenomenon.

## **5.6. Multivariate analysis**

In comparing general trends for the distribution of PiCs and SeCs and the development of different types, the shift in the use of modal constructions became visible, and their temporal stages could even be approximately identified. Now I shall examine the effect of multiple intra- and extralinguistic factors (variables) that have been claimed to correlate with noncanonical nominative marking instead of canonical accusative marking. Two major intralinguistic structural factors that have been considered to influence the choice of NPiC or APiC were already examined above, that is, the presence or absence of DatS and the position of the object and subject NPs. Now I shall analyze to what extent these two factors interact with other factors and if the correlation structure of the conditioning factors changed over time. In Chapter 3 several variables proposed in previous works were discussed. Now, a generalized linear model (e.g., Baayen 2008: 303-321) with all these structural and nonstructural (extralinguistic) factors (variables) has been set up for a qualitative analysis based on the corpus data from CHaRLi that helps to explain the nature of the shifts and subsequently to design an adequate explorative model for further research. Moreover, these factors could be helpful for finding and describing such patterns in further datasets.

The methodology and application of multivariate analysis (specifically, logistic regression modeling, or lrm) for diachronic studies have been partially discussed in theoretical works (e.g., the methodology in Tabachnick & Fidell 2001, Wolk, Bresnan, Rosenbach, Szmrecsanyi 2013, or Hilpert & Gries 2016). In these studies, it has been demonstrated how the multivariate techniques could be useful for diachronic linguistic studies, because they can also be applied to the small samples diachronic studies often deal with and because they can account for the huge variability in diachronic corpus data.

My analysis is based on instances of NPiCs and APiCs retrieved from CHaRLi for the Old Russian (29.374 tokens) and the Middle Russian periods (357.903 tokens). The distribution of

the PiCs has already been documented in Chapter 5.2. As we are interested in the effects of the interactions of different variables on the choice of NPiC or APiC, the main purpose of this analysis was to test some of the theoretical assumptions by using the corpus data. All the possible variables are listed in Chapter 3, however, not all of them could be tested quantitatively. For this reason, some considerations from my qualitative analysis about specific cases of the use of NPiC and APiC will be presented at the end of this chapter (such as where the texts were composed; this includes different regions and more than 25 cities). For the analysis, PiCs were extracted from the corpus together with any included information about the structural properties and additional information about the source, and the PiCs were then used for a systematic analysis. As the next step, the data were prepared and loaded into the R statistical software package, which helps to investigate the actual effects of all factors. By comparing the development of these variables and their effects across two constructions, we can assess whether an individual change is construction-specific or might point to a more general change in grammar that could also be interpreted as pointing to parallel intralinguistic development processes. The table below shows the set of variables identified for testing in CHaRLi, where these variables were annotated independently from each other, thereby permitting the corpus to be interrogated across multiple levels and possible interactions between the variables to be investigated. The variables are listed in the table (25) below with a column (option) specifying the value of the binary predictor:

**Table 25** List of variables.

	<b>Variable</b>	<b>Abbreviations in the lrm model</b>	<b>Option</b>
1	Position of the object NP with regard to infinitival verb	Position	PRE-verbal position
			POST-verbal position
2	Presence or absence of DatS	DAT	Yes (+)
			No (–)
3	Position of DatS regarding the object NP	DAT_Position	Pre-object position
			Post-object position
4	Animate or inanimate objects	Animate	Animate
			Inanimate

5	Text category	Text cat	Hybrid text
			Statutory text
6	Location (where text was composed)	GEO	north dialects
			others

The first four variables represent structural factors (position of the object and subject NPs, type of noun) and 5 and 6 are extralinguistic factors (regional factors, register variation). First, I considered the position of the object and subject NPs (in lrm referred to as “Position”). Its outcome can be a “pre” or “post” position with regard to the infinitival verb or to the object NP. Second, the presence of a DatS (in lrm referred to as “DAT”) and its position in relation to the object NP (in lrm referred to as “DAT\_Position”) has an outcome that can be +/– and be placed in a pre- or post-object position with respect to the object NP. Finally, the fourth variable describes whether the nominal is an animate or inanimate object noun (in lrm referred to as “animate”). In order to observe whether there are possible preferences in the use of constructions within different text categories in chancellery texts, I considered the text category (in lrm referred to as “TEXT CAT”), which in my sample can either be “statutory” or “hybrid”. The last variable considers the region where the text was composed (in lrm referred to as “GEO”). Because the linear regression method needs a binary variable, the 30 cities were divided into two groups. It was assumed that, historically, the North Russian dialects refer approximately to the area above the course of the upper Volga; therefore, the division delineated the two groups as “north” and “others” (also in the lrm).

Once all types of construction had been annotated according to the list of variables, I applied linear discriminant analysis (LDA) stepwise. From the values of each variable of each construction, the LDA computes how important each variable is for the discrimination of the two constructions (in the two samples)<sup>78</sup>. After that, a summary of the model provides the most relevant information. I first built two separate datasets for two periods – the Old Russian and the Middle Russian periods – and then tested the preference ratings for two variables (NPiC or APiC) and the interaction with the six variables mentioned above. The results of this test are

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<sup>78</sup>“The most important result for the given study is the multiple correlation coefficient *R*, which indicates how well the independent variables relate to the dependent variable, the choice of construction that is made. If it is smaller than 0.05 then that the correlation between two predictors did not happen by chance.” (Gries 2003, Multifactorial analysis in corpus linguistics).

shown in the following logistic regression model. I assigned a parameter to each of the different factors and could retrieve the effects of these variables on the choice between the constructions under the assumption of the model (for examples of its use, see Gries 2010). Some of them seem to be significant according to the analysis (Position and absence or presence of DatS), the results for others indicate that they might be negligible (text type and location) and can be therefore excluded from the further qualitative analysis<sup>79</sup>. The calculations for the model were indicated by the following line of code:

```
Lrm (formula = CONSTRUCTION ~ POSITION + DAT +DAT_POSITION + ANIMATE +
TEXT CAT + GEO)
```

Again, this technique was applied stepwise: I first built two separate models for two periods, namely for Old and Middle Russian. Only the main effects and interactions significant in this model were then included in the pairwise models, with interactions between variants. The results of the lrm analysis below were based on the dataset for Old Russian, which consists of 70 observations of the one dependent and six independent variables. The result of logistic regression modeling depending on the *p*-value coefficient indicates in this analysis whether there is a significant correlation between different factors and variables. If the *p* value is smaller than 0.05, it means that there is a statistically significant correlation between them:

Logistic Regression Model for the dataset for Old Russian

```
Lrm (formula = CONSTR ~ POSITION + DAT +DAT_POSITION + ANIMATE + TEXT
CAT + GEO)
```

		Model Likelihood		Discrimination		Rank Discrim.	
		Ratio Test		Indexes		Indexes	
Obs	70	LR chi2	11.81	R2	0.228	C	0.717
APiCs	21	d.f.	5	g	1.466	Dxy	0.434
NPiCs	49	Pr(> chi2)	0.0375	gr	4.330	gamma	0.523

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<sup>79</sup>The two factors, i.e., register variation and dependence on the geographical location, need to be analyzed in future studies in more detail. However, for such an investigation, an extended dataset would be needed in order to provide this kind of information. Presently, diachronic data still suffer from incompleteness and unavailability as well as missing criteria for “normality”.

max  deriv	0.002	gp	0.221	tau-a	0.210
		Brier	0.198		

Comment: These are different measures of the goodness of the model in respect to the data set. Some of the indexes are quite convincing and indicate that the model is well chosen, such as the Brier score (0.198) and C (0.717)<sup>80</sup>. Results of the multifactorial analysis (binary regression) for the Old Russian period.

Dependent variable: **CONSTRUCTION TYPE**

<b>Factor</b>	<b><i>R</i></b>
1) Position = PRE	<b>0.0465</b>
2) DAT = yes	<b>0.0418</b>
3) Dat_Position = PRE	<b>0.0378</b>
4) Animate = yes	0.3960
5) Text cat (statutory/hybrid)	0.4264
6) GEO (North/others)	0.9403

Comment: Both coefficients C and Dxy are indicators for the good predicting power of the dependent variable construction type (NPiC or APiC) with respect to independent variables (Position, DAT, DAT\_Position\_Animate, TEXT CAT, GEO). The results of the lrm analysis based on the first dataset can be interpreted as follows. The table below shows that only three factors have a significant correlation with the choice of construction, namely, the preverbal position of the object NP relative to the infinitive (with a *p* value 0.04), the presence of DatS (the *p* value is 0.04), and the pre-object position of DatS (the *p* value is 0.03). On the other hand, the choice of the construction seems to be rather independent of the animacy of the object, as the *p* value is 0.3. This is an intriguing point that I shall examine further after the discussion of the results for the Middle Russian period. Also, the two nonstructural factors do not seem to

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<sup>80</sup> We can expect better performance of the model after the elimination of factors that are not statistically significant.

be significant, that is, text type and location (both factors have a  $p$  value that is higher than 0.05: 0.4, and 0.9, respectively). This last fact indicates that the constructions are not intrinsically related to the north Russian dialect in the Old Russian period. It seems that the choice of construction type in some way interacts with the position variables ( $p$  values of approximately 0.04 – 0.05 in both cases) and the presence or absence of DatS ( $p$ - value=0.0378). For the Old Russian sample, the interactions between the choice of NPiC or APiC and the animacy of the noun, the text category, and the location ( $p$  value=0.3960, 0.4264 and 0.9403) are not significant for this choice of the model.

The same procedure was carried out for the Middle Russian dataset, which consists of 283 observations of the one dependent and six independent variables:

Lrm (formula = CONSTR ~ POSITION + DAT +DAT\_POSITION + ANIMATE + TEXT CAT + GEO)

		Model Likelihood		Discrimination		Rank Discrim.	
		Ratio Test		Indexes		Indexes	
Obs	283	LR chi2	14.84	R2	0.088	C	0.683
APiCs	67	d.f.	11	g	0.684	Dxy	0.367
NPiCs	216	Pr(> chi2)	0.1898	gr	1.981	gamma	0.386
max  deriv	0.001			gp	0.112	tau-a	0.128
				Brier	0.165		

Dependent variable: **CONSTRUCTION TYPE**

Factor	R
1) Position = PRE	0.0752
2) DAT = yes	0.7857
3) DaT_Position = PRE	<b>0.0418</b>
4) Animate = yes	<b>0.0564</b>
5) Text cat (statutory/hybrid)	0.3960

6) GEO (North/others)

0.8235

Comment: The results of the analysis performed on the dataset for the Middle Russian sample are different from those for the Old Russian dataset. We again considered six variables, and the model performed reasonably well. The results indicate that the position of the dative noun is no longer significant for the model ( $p$  value=0.7857), and also the preverbal position of the object NP ( $p$  value of 0.0752) does not seem to be of statistical significance in this period. However, the position of DatS is still decisive for construction choice. The animacy of the noun is still not significantly correlated with the choice of the construction, as it holds a  $p$  value of 0.0564. Nonetheless, it is worth noticing that there is a convincing shift towards the significance for this variable in Middle Russian.

In order to analyze this in more detail or possibly to add new aspects, I used the ANOVA method (Baayen 2008). The extralinguistic variables (TEXT CAT and GEO) remain ineffective with respect to the construction.

As indicated above, after performing the logistic regression, I applied ANOVA to the data set. This helped to identify the joint influence of several factors and also to determine the magnitude of the significant effects. This last step makes it possible to compare the available texts to each other and find out which of them are significantly different from the others. This is done with the multifactorial analysis of variances (or ANOVA) in R. In the results shown below, f1 to f6 indicate variables that were tested in the model and correspond to the output from the lrm model. The following list explains the notations for each of these variables as used in the model.

f1 = position (preverbal) of the object NP (in the lrm: Position = PRE)

f2 = presence of DATs (in the lrm: DAT = yes)

f3 = preobject position of DATS NP (in the lrm: Dat\_Position = PRE)

f4 = the noun in the object NP is animate (in the lrm: Animate = yes)

f5 = text category (in the lrm: TEXT CAT (statutory/hybrid))

f6 = where the texts were written (in the lrm: GEO (North/others))

> anova(mod.sl)



# Analysis of Variance Table

	Df	Sum	Sq Mean	Sq F value	Pr(>F)
f1	1	0.7723	0.77234	4.5165	0.03641 *
f2	1	0.8084	0.80836	4.5103	0.04105 *
f3	1	1.3939	1.39387	8.1510	0.00538 **
f4	1	0.3769	0.37691	2.1030	0.15617
f5	1	0.0040	0.00396	0.0221	0.88267
f6	1	0.2125	0.21246	1.1854	0.28391
f1:f2	1	0.0989	0.09891	0.5784	0.44900
f1:f3	1	0.0965	0.09655	0.5646	0.45444
f2:f3	1	0.0940	0.09403	0.5498	0.46038
f3:f4	1	0.2941	0.29408	1.8542	0.1789
f3:f5	1	0.3832	0.38315	2.4158	0.1260
f4:f5	1	0.0961	0.09610	0.6059	0.4397
f5:f6	1	0.0392	0.03915	0.2290	0.63349

Residuals 87 14.8775 0.17101

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Comment: This step in the analysis supplies a profound and rather complex insight into the structure of the data. However, the price to pay is that the requirements for the logistic regression and also for ANOVA are higher than those for the simple normality tests and could not always be met by the available diachronic linguistic data. Even if I tried to perform different tests and their combinations, this could only be done within the existing restrictions. The ANOVA test for variance supported the results that were received in the lrm, but no more. In the above results, the asterisks indicate the level of significance for the obtained prediction accuracies; according to this, only three factors for the dataset from Old Russian were marked with an asterisk. This supports the results yielded by the previous test. Factors 1–3 have the respective  $p$  values=0.03641, 0.04105, 0.00538. The first two have one asterisk because the value is  $<0.05$ . f3 has two asterisks because the value is  $\leq 0.01$ . These results confirm the results

of the lrm analysis. f1, the first variable in the lrm model, is the position of the object NP with respect to the infinitive, f2, the second variable, is the presence of DatS in the construction, and f3 is for the position of the DatS with respect to the object NP.

The same test was performed for the dataset for Middle Russian with the following results:

**Table 26** The results of the ANOVA for the dataset of the Middle Russian period.

```
> anova(mod.sl)
```

#### Analysis of Variance Table

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
f1	1	0.6675	0.66746	3.0339	0.09179
f2	1	0.2340	0.23400	1.0636	0.31063
f3	1	1.4859	1.48593	8.9466	0.003576 **
f4	1	0.7723	0.77234	4.6502	0.033687 *
f5	1	0.0283	0.028294	0.1407	0.7106
f6	1	0.2303	0.23027	1.4519	0.2335
f1:f2	1	0.0579	0.05789	0.2631	0.61174
f1:f3	1	0.7343	0.73425	3.3375	0.0776
f2:f3	1	0.0961	0.09610	0.6059	0.4397
f3:f4	1	0.3832	0.38315	2.4158	0.1260
f3:f5	1	0.2941	0.29408	1.8542	0.1789
f4:f5	1	0.0961	0.09610	0.6059	0.4397
f5:f6		0.3832	0.38315	2.4158	0.1260

Residuals 30 6.6000 0.22000

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Comment: Again, the results from the dataset of the Middle Russian period support the findings made by performing the lrm test and demonstrate that two factors, f3 and f4, are significant for the model. This is a remarkable result, as it clearly shows that there is an important influence of animacy on the choice of construction. The result of the statistical analysis also supports the theoretical assumption that the rise of differential object marking with regard to animate/inanimate nouns should be not be dated earlier than the end of the 14<sup>th</sup> – beginning of the 15<sup>th</sup> centuries (see Krys'ko, 2006). The ANOVA analysis confirms the trend observed in lrm, in fact, the level of significance is now smaller than 0.05. f3 has a *p* value of 0.003 and is marked with two asterisks, because the value is  $\leq 0.01$ . f4 is marked with one asterisk because the *p* value of 0.03 is less than 0.05. f3 in this model stands for variable number 3 in the lrm model, which is the position of DatS, and f4 indicates whether the object NP is an animate noun.

Summing up, these results from the stepwise regression analysis on the six factors that have been proposed as potential influences on the use of noncanonical nominative object marking show that the main factors were the main structural components of the PiCs evaluated: the word order of the object and subject NPs, the presence or absence of DatS, and the animacy of the object NP, as well as nonstructural factors, that is, the text category and where the text under consideration was written (geographical information about the source). However, as mentioned before, the two last factors are difficult to compute with statistical methods. This quantitative study allowed us to make two important observations: first, which factors had a significant effect on the construction choice and, second, which is even more interesting for diachronic studies, that the significance of the factors changed over time. In the first dataset, which represents the Old Russian period, the presence of DatS and the positions of the object and subject NPs played a significant role, but in the Middle Russian period, the position of the NPs was no longer significant for the choice of construction as most previous studies supposed. This last result also supports the results of the analysis above in 5.3 and 5.4, where it became obvious that in the Middle Russian period, APiCs preferred the preverbal position. Moreover, in the Middle Russian period, the nature of the noun in the object position became more significant, as case marking related to the animacy or inanimacy of nouns developed in this period (e.g., Krys'ko 2006).

The change was mainly gradual, but steady. The results suggest that the change in the use of modal constructions with independent infinitive proceeds in parallel to the increase in modal

constructions with modal words and nonmodal constructions with finite verbs. Our data suggest that this is a case of a natural and gradual historical linguistic change.

Moreover, this kind of statistical analysis helped to identify and to differentiate between random and nonrandom factors; this is highly important for diachronic studies and can be useful for the further qualitative analysis that needs to be performed in order to explain specific registers and verb adjustments, etc. This will be presented in the next section.

## **5.7. Qualitative analysis**

In addition to the quantitative analysis, I performed a qualitative analysis of all the texts included in CHaRLi and some of the secondary sources, with special attention to the later period (Middle Russian). The quantitative analysis helped to reveal tendencies, but for completeness, a comprehensive qualitative treatment of the texts would be necessary in order to explore the meanings underlying the case variation for object marking in those constructions. Additionally, some texts whose use of the NPiCs or APiCs was mentioned by other authors will be briefly discussed with respect to their textual dimensions. In the appendix, are compiled tables and examples of the use of NPiCs and APiCs from some of these sources.

### **5.7.1. Selectional restrictions for the NP**

First, I shall compare the difference in case-marking tendencies for the object affected by the lexical impact of the predicates that are contained in NPiCs and APiCs. This cannot be a complete description of all the data, because the purpose of this analysis is to discover any regularities or patterns in the alternation between the two cases and in their relation to the characteristics of the infinitive predicate. Therefore, my focus is limited to the most frequent predicates (i.e., more than three instances in the corpus) occurring in constructions with independent infinitives. There is no evidence that this kind of infinitival construction was restricted to particular semantic or syntactic verb groups, and Dunn (1978) also already assumed that it is hard to draw any kind of conclusion about the influence of the lexical content of the components of constructions concerning the choice of the nominative versus the accusative case. Yet, although the texts are very diverse, it does seem possible at least to determine some

tendencies and preferences in the use of one or the other case and to identify some particular patterns of use by grouping certain predicates according to semantic classes that are characteristic for the thematic groups of the texts representing chancellery language. Therefore, I shall also call these verb groups “thematic groups”

In the description of the composition of CHaRLi, the features and classification of the text categories represented in the Russian chancellery language have been discussed in detail (cf. 4.2.1). Two main groups were differentiated: 1) documents of secular authorities, and 2) documents of the church. Each group can be divided into six subgroups according to the domain or topic of the texts. The first group includes documents treating:

- a) agricultural and household documents,
- b) customs and trade documents,
- c) secular-legal documents and,
- d) judicial-procedural documents.

The second group of documents includes documents of the church and/or military documents composed for military or church service. According to this classification, the most frequent verbs were then grouped into five subcategories based on the thematic content of the text. In order to reach a general picture about the distribution of different verbs and in order to check if any preferences in the choice of the case for the object NP can be detected, the verbs were listed first for NPiCs and then for APiCs. The results of this classification are presented below in tables (27) and (28). In the both tables, the verbs are presented in alphabetical order.

**Table 27** List of the most frequent verbs used in NPiCs.

Documents of secular authorities				Documents of the church
Agricultural and household documents	Customs and trade documents	Secular-legal documents	Judicial-procedural documents	Church (and/or military service)
<i>deliti</i>	<i>dopraviti</i>	<i>deržati</i>	<i>činiti -učiniti</i>	<i>celovati</i>
<i>dobyvat'</i>	<i>ôtdati</i>	<i>izbaviti</i>	<i>kazniti</i>	<i>ispraviti</i>

<i>gorodititi - otgoroditi</i>	<i>ôtdavat'</i>	<i>nanjati</i>	<i>otseči</i>	<i>krestiti</i>
<i>izsušit'</i>	<i>platiti, zaplatiti</i>	<i>ostaviti</i>	<i>otrubiti</i>	<i>moliti</i>
<i>kormiti</i>	<i>prodati</i>	<i>ôtdati - ôtdavat'</i>	<i>ouriziti</i>	<i>nositi</i>
<i>kositi</i>	<i>kupiti, vykupiti</i>	<i>otпустiti</i>	<i>obyskivat'</i>	<i>peti (pěti)</i>
<i>loviti</i>	<i>vzimati</i>	<i>ottjagati</i>	<i>posuditi</i>	<i>po(slušati) (litorgija)</i>
<i>meževati</i>		<i>pisati – otpisati - vypisati</i>	<i>poviniti</i>	<i>pričastitisja</i>
<i>očistiti</i>		<i>podkleiti</i>		<i>služit'</i>
<i>otvest'</i>		<i>prašati</i>		<i>tvoriti</i>
<i>pachati</i>		<i>praviti - opraviti</i>		<i>verovati</i>
<i>postradat'</i>		<i>privesiti</i>		
<i>pristroiti</i>		<i>rozyskat'</i>		
<i>prinvest'</i>		<i>slati - poslati</i>		
<i>rozverstat'</i>		<i>spisati</i>		
<i>sejati - posejat' ‘</i>		<i>staviti - pristaviti</i>		
<i>snjati</i>		<i>svesti</i>		
<i>variti</i>		<i>ubaviti</i>		
<i>vesiti</i>		<i>upravlivati</i>		
<i>zbirat'</i>				

\*The pairs of perfective/imperfective verbs are shown on the same line

**Table 28** List of the most frequent verbs used in APiCs.

Documents of secular authorities				Documents of the church
Agricultural and household documents	Customs and trade documents	Secular-legal documents	Judicial- procedural documents	Church (and/or military service)
<i>izsušit'</i>	<i>klikati</i>	<i>dopravit'(ti)</i>	<i>nakazyvati</i>	<i>izbaviti</i>
<i>okopati</i>	<i>končati</i>	<i>končati</i>	<i>prisuzhati</i>	<i>pomazati</i>
<i>otdeljat'</i>	<i>otložit'</i>	<i>otložit'</i>	<i>pustiti</i>	<i>služit'</i>

<i>pachati</i>	<i>otnesti</i>	<i>otnesti</i>	<i>suditi</i>	<i>sozidati</i>
<i>prodevat'</i>	<i>otstavit'</i>	<i>otstavit'</i>		<i>chraniti</i>
<i>protjanut'</i>	<i>podpisat'</i>	<i>podpisat'</i>		
<i>slomit'</i>	<i>položiti</i>	<i>položiti</i>		
<i>složiti</i>	<i>poslati</i>	<i>poslat'(ti) - posylati</i>		
<i>tjanut'</i>	<i>posylati</i>	<i>prislat'</i>		
<i>vyžeči</i>	<i>prislat'</i>	<i>složiti</i>		
<i>vyžigat'</i>	<i>složiti</i>	<i>zapisati - zapisyvat'</i>		
<i>chraniti</i>	<i>torgovati</i>	<i>zavedati</i>		
	<i>vykoupiti</i>			
	<i>zapisati</i>	-		
	<i>zapisyvat'</i>			
	<i>zavedati</i>			

Although there is no clear evidence that some verbs would occur with the accusative or the nominative only, the results of both tables show, first, that there is a difference among these thematic groups and indeed also certain preferences in the use of the nominative or accusative<sup>81</sup>; for example, verbs like *zbirat'*, *pristroiti*, *rozverstat'*, *obyskivat'*, *poviniti*, etc. are preferably used with the nominative, and verbs like *vyžeči*, *okopati*, *klikati*, *zavedati*, and *sozidati* are used with the accusative. Second, the above tables show that there are some lexemes that were only used in specific contexts, whereas another group of verbs were used in all types of documents (e.g., they have a similar distribution in customs and trade documents, secular-legal documents as well as in judicial-procedural documents):

*vzjati* 'to take', *dati(t')* - *vydati* - *otdati* – *otdavati* 'to give',

*imeti* 'to have',

*(s)delati* - *tvoriti* - *učinjat'* - *soveršati* - *praviti* 'to do',

*iskati* 'to search',

<sup>81</sup> It cannot generally be excluded that single attestations of one or the other verb could be found, as all my observations were limited by the corpus data extracted from CHaRLi.

*slat' - poslat' - prislat' 'to send',*

*ukazati 'to show'*

Next, the verbs occurring most frequently with the nominative or with the accusative (from all the verbs found in the PiCs of the corpus) have been listed. The results below are based on the total number of verb items for both cases. Because the difference was based on the semantics of the verbs, all morphologically derived verbs were aggregated, unless the derived verb had a meaning deviating from the basis. These tables (29 and 30, also 31 and 32) permitted the discovery of some differences between NPiCs and APiCs:

**Table 29** The verbs used most frequently in NPiCs in the dataset for Old Russian

1. <i>dati(t') - vydati - ôtdati – ôtdavat' 'to give' - 50 %</i>
2. <i>vzjati 'to take' – 26.08 %</i>
3. <i>znati - vedati - razumeti 'to know' – 15.2 %</i>
4. <i>(u)činiti, delati, veršiti 'to do' – 6.5 %</i>
5. <i>deržati 'to hold', slati(t') – poslat' – prislat' 'to send', platit' - zaplatiti 'to pay' - 2.1 %</i>

**Table 30** The verbs used most frequently in APiCs in the dataset for Old Russian.

1. <i>činiti 'to do' - 36,84 %</i>
2. <i>končati 'to end' - 31,57 %</i>
3. <i>poslat' - prislat' 'to send' - 26,31 %</i>
4. <i>dati 'to give' - 5,2%</i>
5. <i>the same 5,2%: vzjati 'to take', imati 'to have', deržati 'to hold', znati 'to know'</i>

The proportional division of verb items was tested in the dataset for Old Russian first, then, in the dataset for Middle Russian.

**Table 31** Distribution of verbs used with nominative vs. accusative (Old Russian).

Verbs	with the nominative	with the accusative
<i>dati 'to give'</i>	47.826085	5.263158
<i>vzjati 'to take'</i>	26.08696	5.263158
<i>znati 'to know'</i>	15.21739	5.263158



<i>činiti</i> ‘to do’, <i>imati</i> ‘to have’, <i>deržati</i> ‘to hold’	6.521739	<b>36.84211</b>
<i>končati</i> ‘to end’	2.173913	<b>31.57895</b>
<i>slati</i> ‘to send’	2.173913	<b>26.31579</b>

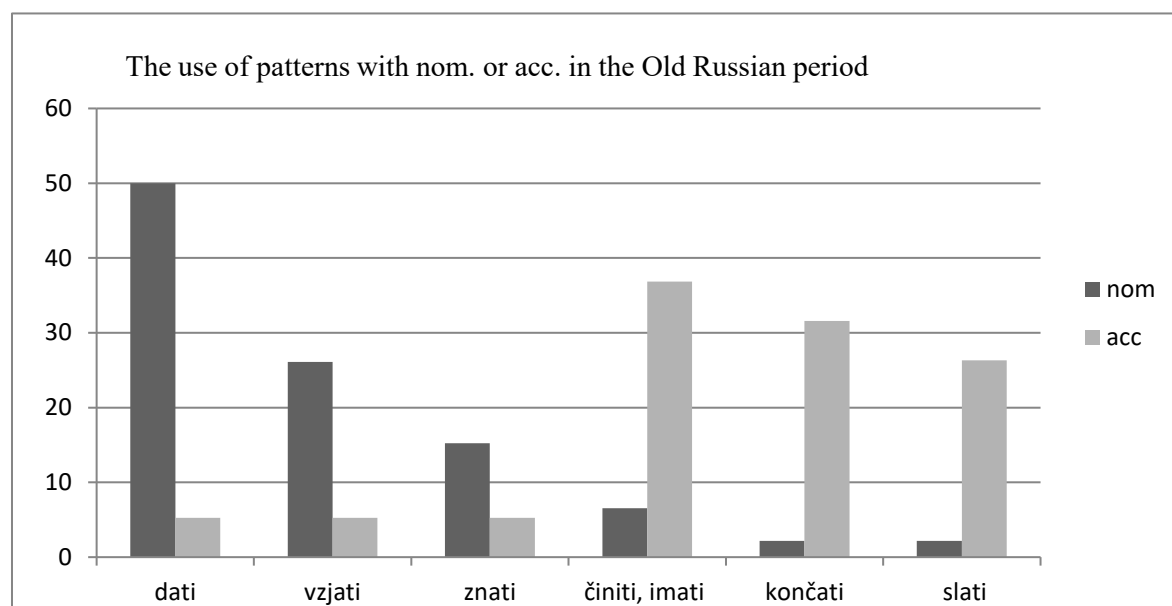
The most frequent predicate patterns used in NPiCs and he APiCs in the Middle Russian period:

**Table 32** Most frequently used verbs with nominative vs. accusative.

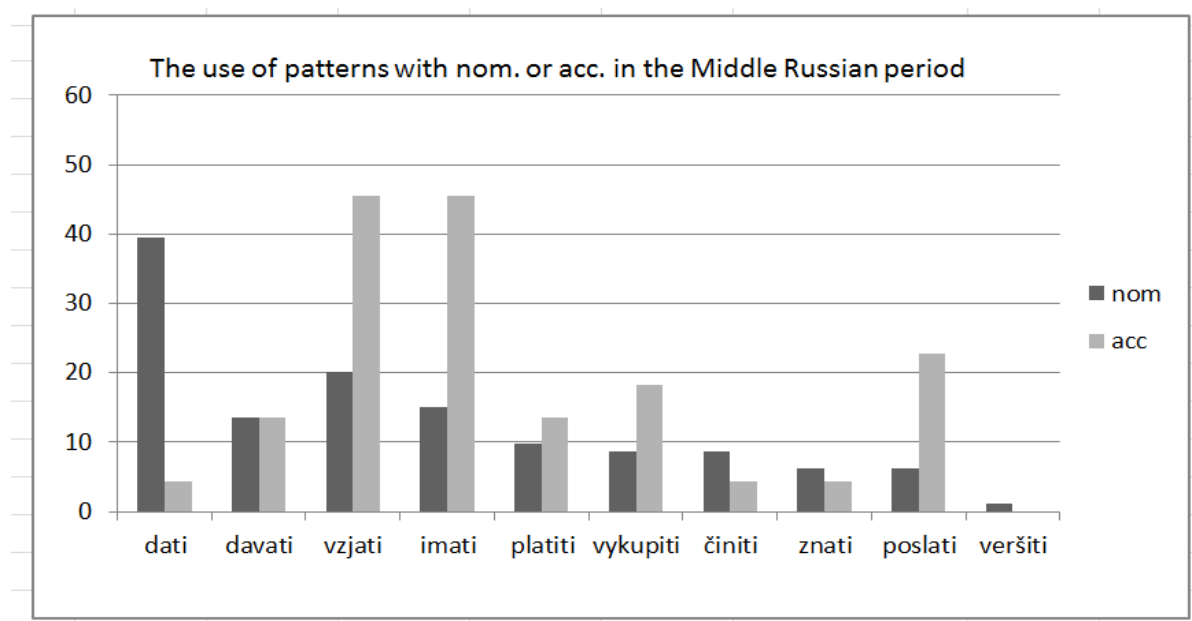
Verbs	with the nominative	with the accusative
<i>dati</i> ‘to give’	<b>39.50617</b>	4.347826
<i>davati</i> ‘to give’	<b>13.58025</b>	13.63636
<i>vzjati</i> ‘to take’	<b>20.20202</b>	<b>45.45455</b>
<i>imati</i> ‘to have’	<b>15.15152</b>	<b>45.45455</b>
<i>platiti</i> ‘to pay’	9.876543	13.63636
<i>vykupiti</i> ‘to buy’	8.641975	<b>18.18182</b>
<i>činiti</i> ‘to do’	8.641975	4.347826
<i>znati</i> ‘to know’	6.17284	4.347826
<i>poslati</i> ‘to send’	6.17284	<b>22.72727</b>
<i>veršiti</i> ‘to do’	1.234568	0

The tables above show that in both datasets, a change in the use, or preferred use, of verbs can be documented. Originally, NPiCs and (to a lesser degree) APiCs were used with three verbs that could be called core verbs: *dati* ‘give’, *vzjati* ‘take’ and *znati* ‘know’. In the Middle Russian period, two other verbs, *platiti* ‘pay’ and *(po)salti* ‘send’, also became more frequent; this is surely connected with the establishment of chancellery language and the restriction of the use of NPiCs to such texts. Interestingly, in the later periods, the use of PiCs apparently became

less common with the verbs of cognition. The graphs below visualize the results of the raw frequencies:



**Figure 43** Proportion of verbal patterns used with the nominative or accusative in the Old Russian period.



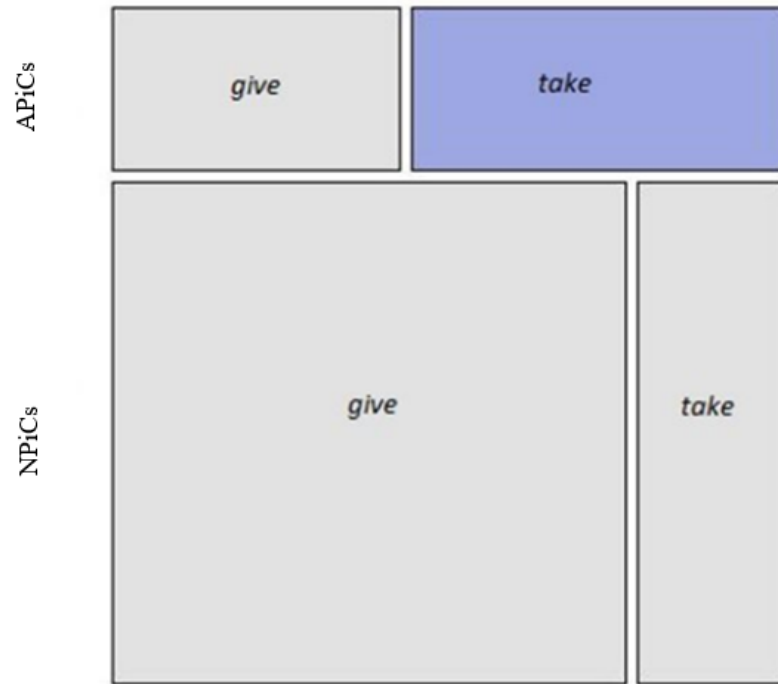
**Figure 44** Proportion of verbal patterns used with the nominative or accusative in the Middle Russian period.

From this analysis, the following main conclusions can be drawn. First, a rough comparison of the distribution of NPiCs and APiCs containing the predicates that were thematically classified according to text type, shows that they differ in the verbs used, with a few exceptions of verbs that occur with both cases, that is, allowing the alternation of NPiCs and APiCs. In future

research, this should be analyzed in more detail. This case variation was a common phenomenon for the Old Russian period (cf. Krys'ko 2006). Second, by comparing the raw frequencies of the verb patterns that occur with the nominative or with the accusative (in both datasets), some general tendencies in the use seem to become visible: The nominative was often used with verbs like *dati* 'to give', *vzjati* 'to take', and *znati* 'to know', whereas the accusative was used with verbs like *činiti* 'to do', *končati* 'to end', and *slati* 'to send'. Third, a comparison of the most frequent verbs as distributed in the two datasets above (for the Old and the Middle Russian period) documented a shift in the preference to use verbs with the nominative or the accusative. Whereas in the Old Russian dataset, the three core predicates *dati* 'to give', *vzjati* 'to take', and *znati* 'to know' were used predominantly with the nominative, in the Middle Russian period (or according to the dataset for Middle Russian), only the verb *dati* 'to give' retained this tendency; the two other verbs (*vzjati* 'to take' and *znati* 'to know') were used with the accusative. In order to support this last assumption, I conducted a test on the significance of use of the predicate patterns *dati* 'to give' versus *vzjati* 'to take' in some texts.

The test for significance of the predictable power of the lexical content of core verbs for the choice of NPIC or APIC was performed on texts from the 16<sup>th</sup> century, that is, *Uloženie* and *Kniga o skudosti i bogatstve i drugie sočinenija* (Pos.). The association plots below demonstrate the possible correlation of the meaning of the infinitive verbs, which I divided into two large groups: first the group with the semantic component 'to take' *vzjat* and the other group with the semantic component 'to give' *dat*'. Even these two examples can inspire further conjecture: the clear significance of the give/take factor in *Uloženie* (Sob. Ul.) leads to a qualitative analysis of the other available data, and it becomes evident that the tendency (even if statistically insignificant) towards a positive correlation between NPICs and the *give/take* verbs can also be perceived in other texts from the third period, such as in Pos.:

Correlation between the semantics of the verb and  
choice of the construction



**Figure 45** Results from the text of Uloženie (Sob. Ul.) Note: give = verbs with the meaning ‘to give’ and take = verbs with the meaning ‘to take’.

Below, some examples from both texts (Sob. Ul. and Pos.) illustrate the use of NPiCs and APiCs. As the graph above shows, both variants could be used with the verbs ‘to give’ and ‘to take’, so for example, in (97) and (98) with verbs like *dati, otdati* ‘to give’ with the nominative and in the next example (99) the verb *vzjati* ‘to take’ used with the nominative, and likewise in the next three examples, but with the accusative (100), (101) and (102) with verbs meaning ‘to take’, that is, *vzjati* and *imati*; and ‘to give’, that is, *otdati*:

(97) Pos, 17<sup>th</sup> c.:

<i>tokmo</i>	<i>pod'jačemu</i>	<i>ot</i>	<i>zapiski</i>	<i>dat'</i>	<i>kopejka,</i>
only	clerk - DAT:	from	writings	to-give - INF	penny - NOM.F.SG

‘It is only for the clerk to give (to pay) a penny for the writings.’

(98) Sob.Ul., 17<sup>th</sup> c.:

<i>i</i>	<i>ta</i>	<i>votčina</i>	<i>otdati</i>
and	this - NOM.F.SG	land estate - NOM.F.SG	to-give - INF

‘and it is necessary to give away this land estate’

(99) Sob.Ul., 17<sup>th</sup> c.:

<i>i</i>	<i>po tech</i>	<i>vzjati</i>	<i>poruka</i>	<i>z</i>	<i>zapis’ju</i>
and	for them	to-take - INF	guarantee - NOM.F.SG	with	written confirmation

‘and for them it is necessary to take the guarantee with written confirmation’

(100) Sob.Ul., 17<sup>th</sup> c.:

<i>a</i>	<i>imati</i>	<i>penju</i>
and	to-take - INF	fee - ACC.F.SG

‘and it is necessary to take a fee’

(101) Sob.Ul., 17<sup>th</sup> c.:

<i>i</i>	<i>na</i>	<i>nem</i>	<i>za</i>	<i>tot</i>	<i>kamen’</i>	<i>vzjati</i>	<i>cenu</i>
and	for	him	for	this	stone	to-take-INF	price - ACC.F.SG

‘and it is for him to take the price for this stone’

(102) Sob.Ul., 17<sup>th</sup> c.:

<i>a</i>	<i>druguju</i>	<i>polovinu</i>	<i>otdati</i>	<i>čelobitčiku</i>
and	other - ACC.F.SG	half - ACC.F.SG	to-give-INF	petitioner - DAT

‘and it is necessary to give the other half to the petitioner.’

### 5.7.2. Some notes on the dialectal use of NPiCs and APiCs

The question of the geographical distribution and, possibly, limitation of the construction to the North Russian dialectal area is still under discussion. Analysis of the distribution of both variants seems to be difficult, because current dialectal studies only include questionnaires for

examining the use of the NPiC, not the APiC. The most extensive study on the modern dialectal use of nominative object constructions was presented in the studies of Kuzmina and Nemčenko (1964) based on questionnaires for the dialectal atlas. In their study, two main geographical areas were distinguished based on the number of examples with nominative object constructions. The first group comprises regions that belong, for the most part, to the North Russian dialectal zone, where more than four occurrences of NPiCs and NSeCs have been found (the material contains more than 2300 occurrences from 450 regions). In the second group of regions, NPiCs or NSeCs were not so frequent (two or fewer occurrences); these were found in the Central and South as well as some North Russian dialect zones. Although it is clear that NPiCs survive in some modern North Russian dialects, their existence at the present time in Central and South Russian dialects is much more questionable. In the South Russian sources, NPiCs were regularly used in the later Middle Russian period (see the study in Dunn 1979 on the documents from this area). However, the majority of NPiC examples have been found in texts representing the chancellery language. Meanwhile, in the area of Moscow, the use of this construction was mostly sporadic in this period. Therefore, some facts about the use of the NPiC will be briefly summarized here and compared to the findings from the Old and Middle Russian periods.

According to the study of Kuzmina and Nemčenko (1964), in the modern North Russian dialects the following construction patterns could be found as prototypical NPiCs, such as in the following example (103) *voda* ‘water’, a feminine noun in the singular ending with *-a*:

- |       |   |                |               |
|-------|---|----------------|---------------|
| (103) | <i>Voda</i>   | <i>nosit'</i>  | <i>daleko</i> |
|       | water - NOM.F.SG                                    | to-bring - INF | far away      |
|       | ‘i is necessary to bring the water [from] far away’ |                |               |

Examples with the modals *nado* ‘need’ (104) and *možno* ‘it is possible’ (105) are also frequently used in the dialects of Pskov:

- |       |  |                 |                  |               |
|-------|--|-----------------|------------------|---------------|
| (104) | <i>nado</i>                                    | <i>nakosit'</i> | <i>trava</i>     | <i>korove</i> |
|       | need - MOD                                     | mow - INF       | grass - NOM.F.SG | cow - DAT     |
|       | ‘it is necessary to mow the grass for the cow’ |                 |                  |               |
| (105) | <i>Krupa</i>                                   | <i>klast'</i>   | <i>možno</i>     |               |
|       | cereal - NOM.F.SG                              | to-put - INF    | possible - MOD   |               |

‘Is it possible to put inside the wheat’

There are also examples of NSeCs-1 with an infinitive dependent on another infinitive as in (107) from Pskov dialect or on the finite matrix verb as in (108) from Ol’kovo Andomsk. Volosti:

- (106) *Pojiti*                                      *korova*                                      *pogljadet’*  
go - INF                                      cow - NOM.F.SG                                      to-see - INF

‘it is necessary to go to see the cow’

- (107) *Chodil*                                      *korova*                                      *posmotret’*  
go - PST. 3.SG.M                                      cow - NOM.F.SG                                      to-look - INF

‘He went to look at the cow.’

Frequently, one could also find constructions with a finite verb + nominative (in my classification, NSeCs-2). It is notable that, quite often, in dialects examples of NSeCs-2 with masculine plural nouns are found that were not used in the Old or Middle Russian texts as in (108):

- (108) *Pokupajut*                                      *kury*  
buy - PRS.3PL                                      chicken - NOM.PL

‘they are buying chickens’

There are also examples of the NSeCs-2 with an imperative as in (109) and (110):

- (109) Serebrjanka Efimovsk. Len.:

*Sumka*                                      *polož’*  
bag - NOM.F.SG                                      put - IMP

‘put your bag (here)’

- (110) Griбанова Gora Konošsk. Arch.:

*Postav’*                                      *skamejka*                                      *sjuda*  
put - IMP                                      bench - NOM.F.SG                                      here

‘put the bench here’

Some examples for NSeC-2 (with a past participle) have also been found in the dialectal material (111 - 113):

- (111) Gribanova Gora Konošsk. Arch.:

*Vera polovina byla vidavši (o kinokartine)*

Vera half - NOM.F.SG was see - PTCP PAST (about film)

‘Vera has seen only half (of the film)’

- (112) Burmakino Kapšinsk. Len.:

*spat’ ne pojdet ne rešivši zadača*

sleep not go not solve - PTCP PST. task - NOM.F.SG

‘He would not go to sleep [if he] did not solve the task’

- (113) Kudamozero Vytegorsk. Vol.:

*on ne znavši doroga pošel*

he not know-PTCP.PST way - NOM.F.SG went

‘He went without knowing the way’

It was also noted (cf. Kryš’ko 1994) that the nominative object is often used in sentences involving time expressions, such as in the follow examples (114 – 116):

- (114) Voevodino Emel’janovsk.Kalin.:

*on vsju zima byl na pečke*

he all - ACC.F.SG winter - NOM.F.SG was on stove

‘All winter he spent on the stove’

- (115) Gimreka Podporožsk. Len.:

*vsja žizn’ rabotano*

all - NOM.F.SG life - NOM.F.SG work - PTCP.PASS



‘All of life was put to work’

(116) Kuzovlevo Mičnevsk. Mosk.:

<i>vsja</i>	<i>vojna</i>	<i>na</i>	<i>fronte</i>	<i>byl</i>
all - NOM.F.SG	war - NOM.F.SG	on	front	was - PST.M.3.SG

‘[During] all the war he was on the front’

The nominative object can often be found in proverbs:

(117) Čudalovo Oparinsk. Kir.:

<i>chorošo</i>	<i>oreški</i>	<i>kušat’ -</i>	<i>ne rabota</i>	<i>rabotat’</i>
good	nuts	to-eat - INF	not work-NOM.F.SG	to-work - INF

‘It is good to eat the nuts – not to do the work’

In order to compare the tendencies visible in the later sources, it was interesting to analyze the tendencies in the use of the predicate with a nominative object. Kuzmina and Nemčenko (1964) noted that the use of PiCs and SeCs does not correlate with respect to the two geographical groups. In the areas of the first group, NSeCs-2 (with a finite verb) were attested to less frequently than in the second group (mostly from the South and Central dialectal zones), although in the latter, the total number of nominative object constructions was smaller than in the first group. However, most examples of nominative object constructions in the first group, 1074 out of 1416 occurrences, are NSeCs-1 (with an infinitive dependent on the modal word *nado* ‘need’). In the second group, it is difficult to draw an objective picture because the proportions of PiCs and NSeCs-1 differ from region to region (Kuzmina & Nemčenko 1964: 163). According to the available data from Kuzmina and Nemčenko (1964), patterns of the most frequent verbs used in NPiCs can be identified:

1) *brat’*, *vzjat’*, *dat’*, *prosit’*, *delat’*

3) verbs of perception: *videt’*, *smotret’* - *posmotret’*, *gljadet’* - *pogljadet’*, *sluxat’* - *poslušat’*

4) verbs of emotion: *ljubit’*, *žalet’* - *požalet’*, *‘chotet’*

5) verbs of achievement: *dostat’*, *iskat’*

6) verbs of motion: *idti- pojti- prijti, chodit'- shodit', begat'- sbegat', poechat', slazit'*

7) other verbs that describe domestic or rural activities: *varit', vozit', vjazat', gladit', gotovit', gret', drat', est', zagotovljat', kosit', kušat', lovit', molot', nachodit', pet', peč', pilit', pit', poloskat', prjast', rvat', rastit', rubit', sejat', sobirat', taskat', tkat', chlebat', šit', slomit', posadit', popraviti', podvinut', močit', strogat', sčest'.*

In this analysis of the earlier and later use of the noncanonical nominative versus canonical accusative object marking with different types of verbs in the chancellery language briefly compared with their distribution in modern dialectal use, some general conclusions can be drawn. First, SeCs were used more frequently in the later Middle Russian period and also seem to be common in dialectal use. Second, it seems that, during all evolutionary processes, there was a clear correlation between the choice of construction (NPiC vs. APiC) and the semantics of the verbs (or verb patterns). This ought to be analyzed in more detail in further research. Third, even a brief comparison of dialectal data with the tendencies observed in Old and Middle Russian supports the view that specific verbs were used especially often in NPiCs. In the historical data and in the dialects, three core verb patterns could be identified: *dat', vzjat', delat'.*

## 5.8. Specific cases and comments on different texts

Several specific cases are issues that still need to be dealt with more deeply in further research on this topic. I shall demonstrate the five most important considerations resulting from the analysis.

First, a deeper examination of the texts and contexts led me to the conclusion that according to empirical evidence, NPiCs and APiCs existed side by side in the earliest Old Russian period and were in competition in the Middle Russian period, until the rule of accusative-object marking for the direct object won out, and nominative object marking disappeared from the written Russian tradition. However, in dialectal use, nominative object marking still predominated. The case variation of NPiCs and APiCs can be interpreted as an overlap of two original rules. The choice of nominative or accusative object marking, however, cannot always be explained as a rule-driven process. It is a tendency with specific patterns of application. I also agree with the formulation in Dunn (1978) that the use of nominative object marking was permitted by syntactic context, but not mandatory, as will be seen in more detail below.

However, and this is the second consideration, the use of NPiCs or APiCs must also have been influenced by pragmatic constraints rather than exclusively by syntactic context, especially in the later period. This, in some cases, makes it difficult to explain the actual force of nominative marking based only on structural factors, as especially in the hybrid chancellery texts, the predominate use of NPiCs in the later period was motivated by external factors. Moreover, in some cases it seems that the possibility of ‘free’ or unmotivated variation cannot be completely excluded.

Third, the apparent prevalence of NPiCs in some texts (like OKB) could also be explained by the preferred use of the nominative object in specific environments like the ‘figura etymologica’ as in ‘*služba služiti*’ or in ‘formal clauses’ ‘*ruka priložiti*’.

Fourth, one can recognize three groups of specific patterns in which the NPiC is used, namely in specific types of ‘formal clause’ (Ru.: ‘*formuljarnye klausy*’), in the figura etymologica, and in the so-called ‘nominative in a list’ (where the use of the nominative has been explained by the proximity to the infinitive verb, cf. Chapter 2.2).

Fifth, it can be argued that these three patterns of use contaminated each other and helped to preserve the use of NPiCs especially in the later period. However, the evolutionary process for the three types differed and was influenced by different factors. Some of these constructions are still established in dialectal use (e.g., the use of the nominative with a finite verb). Some of them lose the nominative marking, such as *ruka priložit* → *ruku priložit*’; in the earlier texts, this sentence was marked by the nominative, whereas in the later texts it is often marked by the accusative. In other cases, the constructions preserve a nominative object marking, as in *trava kosit*’, that is still used with the nominative in modern dialects<sup>82</sup>. The development of different patterns could be the result of the development of new categories (like the category of animacy) as well as competition and variation in the case marking for an object (i.e., the variation between genitive and accusative or nominative and accusative) and the grammaticalization of other categories (i.e., from purposive participle to infinitive), etc. (for more examples, such as *tivunъ deržati*, see the Appendix ).

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<sup>82</sup> The developmental processes in diverse types can have different characteristics: 1) change from nominative to accusative marking or 2) “conservation” of nominative marking.

These conclusions are important in assessing the status of NPiCs in Russian and their distribution during the period of their existence in the written language. The first two of the above observations were already confirmed in the studies by Dunn (1978) and Krys'ko (1994). My own examination of data sources also led me to the conclusion that the use of NPiCs and APiCs in the earlier period was not restricted to a specific language level. A few instances were found in the Laurentian Chronicle, in the Galician-Volynskian Chronicle, and in the Ipatian Chronicle; they were more regularly used in the Novgorodian documents (the Birch bark documents, the Novgorodian Chronicle, in the hybrid text *Voprošanie Kirikovo* (VK) and other sources). The preference in the use of the accusative case instead of the nominative with an independent infinitive could, however, also be explained by the fact that the scribes or authors did not focus on the texts of the chronicles but rather on all known texts. The texts of the chronicles include many the independent dative constructions that are 'the basic strategy of a chronicler' (Ševeleva, 2010: 215). On the other hand, scribes or authors of the text also knew of another construction, the so-called *nominativus absolutus* (which goes back to the ancient Greek). This construction, however, is supposed to be characteristic not only of the standard register of the Church Slavonic language, but also for the living speech of the scribes, as is testified to by the Old Russian variants of the affixes (but not by their Church Slavonic variants<sup>83</sup>). For instance, in the construction *vchodešči vo oltar* 'on entering the chancel' is the location of the object that is indicated by the description of the path to it. All such constructions constitute input for the continued evolutionary process of the NPiCs and should be taken into consideration in future research.

APiCs have also been attested to in the same texts, but with lower frequency; this permits the conclusion that both variants could be used side by side throughout the whole history of the existence of the NPiC in the written Russian language. According to my findings, however, a closer examination of the data in apparently similar contexts helps to identify different tendencies in the use of the nominative or the accusative (however this remained a tendency that never became a rule). Zaliznjak (2004) argues that in the early period, the use of APiCs or NPiCs was already motivated by the syntactic context (the independent infinitive occurs with a nominative and the dependent infinitive with an accusative noun in the object position). As mentioned before, however, because variants with a nominative and an accusative already both

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<sup>83</sup> For details about the predicative usage of actual participles in the present tense in the Kiev chronicle, see Sedukova (2013).

existed in Old Russian texts, it is difficult to assume that the use of NPiCs was prescribed by one syntactic rule. First, the nominative was used in another syntactic environment (with an imperative and with a finite verb) and the accusative was also used with independent infinitives. Second, the popular assumption that in the Old Russian period all sentences with an independent infinitive had a noun in the object position in the nominative and that the use of NPiCs was restricted to *-a*-type nouns was rejected by, for example, Miller (1874) and Krys'ko (1994). Krys'ko showed that in sentences with an independent infinitive, the accusative form of *-o*-type masculine nouns ending with *-ъ* were also used regularly as in the example: *deržati tivunъ* 'to have (one's own) royal serf' (in GVNP N 1, 2, 3, 6, 7, 9, 10, 14, 15, 19, 22, 26, 77) (1994: 193). There is only one clear masculine example in the nominative case for NPiCs which was already cited in Chapter 2 (example (61)) and is presented here again:

(61) Ber.gr. N 93, 1460:

<i>A osetre</i>	<i>imъ</i>	<i>imati</i>	<i>po starine</i>
and sturgeon - NOM.M.SG	they - DAT	to-take - INF	according to custom
'They should take the sturgeon according to custom.'			

This example demonstrates that the use of the NPiC construction was not restricted to the feminine *-a*-type declination. In the example, the word *osetre* 'sturgeon' is in the nominative with the Novgorodian ending *e*. Thus, it cannot be excluded that masculine and neuter nouns were affected by this tendency, but it is difficult to prove, as the endings for masculine and neuter nouns are not distinguished in Old Russian. Only in the Novgorodian dialect was the nominative case different from the accusative case, at least initially, in both the singular and plural forms of masculine nouns. Unfortunately, up until now we have very little demonstrative material on the masculine gender, because even from the 14<sup>th</sup> century on, both nominative and accusative masculine nouns could be accidentally mixed. Such less-clear examples, which also occur in the Birch bark documents, can be exemplified by the following sentences (118) or (119):

(118) Ber.gr. N 142, 13<sup>th</sup> c.:

<i>A mně</i>	<i>naklady</i>	<i>tvoc</i>	<i>dati</i>
and I - DAT	losses - NOM.M.PL	yours	to-pay-INF

‘And it is necessary for me to pay your losses.’

(119) Ber.gr. N 202, 13<sup>th</sup> c.:

<i>na</i>	<i>Domitr</i>	<i>vožit</i>	<i>doložikъ</i>
for	Dmitriy	to-recover - INF	debt - NOM.M.SG

‘And it is necessary for Dmitriy to collect the debt.’

Both examples could contain the nominative case, although in example (119) the modifier ‘*tvoc*’ is, by its form, in the accusative, and in example (120) the form *doložikъ* (the word *dolžki* ‘small debts’ is the diminutive from ‘debt’) is quite questionable; the ending -ъ used here can be interpreted both as an accusative and as a nominative plural. Moreover, especially in the later period, sentences with both an independent infinitive and a masculine noun were used more frequently (120):

(120) Ber.gr. 1601<sup>84</sup>:

<i>I</i>	<i>tot</i>	<i>chleb</i>	<i>prodati</i>	<i>da</i>	<i>dati</i>
and	this - ACC.M.SG	bread – NOM/ACC.M.SG	to-sell - INF	and	to-give-INF
<i>po</i>	<i>duše</i>	<i>moej</i>			
for	soul	my			

‘and this bread is to sell and to give for my soul’

The question of robust word order remains difficult to answer. Moreover, as we know, the word order in Old Russian sources was not fixed and the nominative actually appears in most of the sources in a post-verbal position: For example, in the earliest copies of *Russkaja Pravda*, only three examples occur preverbally, whereas 20 occur postverbally. Also in the *Treaty* from 13<sup>th</sup> century, a postverbal position of the nominative was observed in most examples (12 out of 18) for NPiCs. However, if one compares the use of NPiCs to that of APiCs, a clear preference for a preverbal position in NPiCs and a postverbal position in APiCs can be seen. The preverbal position cannot be explained by stylistic variation (as Timberlake supposed). This could possibly indicate the proximity of NPiCs to the nominative + dative construction. In the later

<sup>84</sup> This example is found in ruscorpora in the Middle Russian subcorpus (15.05.2015).

Middle Russian period, it seems that the preverbal position of the object NP became the specific property of these modal infinitive constructions and affected APiCs. So, in the later period NPiCs and APiCs do not show a recognizable difference. The preverbal position was used as a specially marked feature into which the accusative variant was blended. My main interest was a more detailed analysis of the later use of NPiCs. For this period, it is noteworthy that until the end of the 17<sup>th</sup> century, NPiCs were used more frequently than APiCs (also in the Muscovite chancellery language and in the documents of South Russia). The use of NPiCs in the later periods became more restricted and more complicated, possibly due to the contamination by different constructions co-existing at this time and the high degree of language variation.

Some of the uses of NPiC in specific contexts that could invalidate the statistics and therefore should be considered when analyzing these constructions now remain to be discussed. As mentioned before, in modern Russian dialects (according to the studies of Kuz'mina & Nemčenko, 1964), the atypical use of the nominative with a finite verb is common for written Russian as in (121):

- (121) Ostaškovo Oktjabr'sk.Vel.:\_
- |                          |                       |
|--------------------------|-----------------------|
| <i>prinesla</i>          | <i>tjeplaja voda</i>  |
| bring - PST.2SG.F        | warm-water - NOM.F.SG |
| 'she brought warm water' |                       |

This 'atypical' use of the nominative + a finite verb has, however, been attested to already in the Old and Middle Russian sources, but not as late the 17<sup>th</sup> c. (as Timberlake 1974: 44-47 supposed). In the work of Isačenko (1974), an example of the nominative + a finite verb was quoted from the text of *Ustav Sudijskij* ('Canon law') from approx. the 12<sup>th</sup> century. Other examples have been found in texts from the 13<sup>th</sup> (122) and 14<sup>th</sup> – 15<sup>th</sup> centuries (123); however, more frequently, they were quoted from texts dated to the 16<sup>th</sup> – 17<sup>th</sup> centuries (124; which have already been cited in Chapter 2 and are repeated here):

- (122) Gram. Nap. N6, approx. 13<sup>th</sup> c.:
- |          |              |                    |                |                             |
|----------|--------------|--------------------|----------------|-----------------------------|
| <i>A</i> | <i>nyně</i>  | <i>esmъ</i>        | <i>uvidalъ</i> | <i>ljubov' vaša pravaja</i> |
| and now  | AUX          | to-see - 1.SG.PAST |                | love-your-true - NOM.F.SG   |
| <i>s</i> | <i>snomъ</i> | <i>moimъ</i>       | <i>s</i>       | <i>Vitenemъ</i>             |

with son my with Viten'

'and now I have seen your true love (for) my son Viten.'

(123) Ber.gr. 169, 14<sup>th</sup> – 15<sup>th</sup> c.:

*Ontane poslale Ovdokimu dva kleša da šuka*

Anton sent-PAST.2.SG Evdokim two bream and pike - NOM.F.SG

'Anton sent two breams and one pike to Evdokim'

(124) Mor, 16<sup>th</sup> c.:

*A ta zemlja čistil Ivan Brylkin*

and this -NOM.F.SG land - NOM.F.SG to-clean-PAST.2.SG. Ivan Brylkin

'and this land has been cleaned by Ivan Brylkin'

In most studies, it was assumed that the use of the nominative in such contexts was unmotivated. The preverbal position and the use of the same lexeme, which are commonly used in NPiCs, could be an indication of the connection between the NPiC and the nominative + finite verb construction (the accusative + finite verb was always in the postverbal position). Moreover, in the same text, some rare examples with a nominative + imperative have been found (generally, the accusative case was used).

It also seems to be the result of the case variation for object marking between the genitive-accusative and nominative-accusative (for more details, see Krys'ko 2006). Moreover, it seems that the use of the nominative + a finite verb could also be explained as crosscontamination between two different co-existing 'rules'. The first rule – or, better, tendency – for the nominative object is to be marked in infinitive modal sentences (NPiCs), and the second rule is the so-called 'nominative in list' marking. A closer look at the context (especially in the later period) suggests that a nominative object with a finite verb was common for narration contexts in which different objects are just listed and occur with one finite verb. It is possible, therefore, to explain this atypical use of the nominative object by possible contamination by the 'nominative in list'. Šachmatov (1903) formulated a rule for this use: when various objects are listed, only the first one, which is closest to the finite verb, is in the accusative, and the others stay in the nominative case. Zaliznjak (1995: 138–139) noted that such examples have already been found in the Birch bark documents (example above). However, there are also many



examples where this rule does not seem to be consequently applied; this could be a possible indication of the contamination of the two application motives ('nominative in list rule' and semantic restrictions of the verb) as in the following example, which was already cited in Chapter 2 (22).

- (22) *a se daju synu svoemu knęzju Jur'ju, Zvenigorod so vsęmi volostmi,*  
 and this give - PRS.1.SG son own lord Jurij Zvenigorod with all parish  
*i s tamgoju (...) i sъ sely, so vsemi pošlinami A volosti Zvenigorodskie: [...]*  
 and with seal and with villages, with all duties And villages Zvenigorod  
*Skirmenovo s Belmi, Trostna, Neguča, Surožyk, Jur'eva sloboda,*  
 Skrimenov from Trostna-NOM.F.SG Negucha-NOM.F.SG Jurjeva land-  
 Belm Surozhsk NOM.F.SG  
*Zamošъskaja sloboda, Ruza gorodok Kremična [...]*  
 Zamosk land-NOM.F.SG Ruza -NOM.F.SG city Kremich - NOM.F.SG  
 'and this I will give to my son lord Jurij Zvenigorod with all parishes and with seal (...) and with villages and with all duties. And the land of Zvenigorod: [...] Skrimenovo from Belm, Trostna, Negucha, Syrozsk, Jurjev land, Zamorsk land, Ruza city, Kremich [...]'

As mentioned before, the overwhelming use of NPICs especially in the later Middle Russian texts (dating from the 17<sup>th</sup> c.) could also be explained as a result of nominative object marking in so-called 'formal formulae/clauses' such as *isprava učiniti* 'to do justice', *ruka priložiti* 'to put the hand', *znati svoja služba* 'to know your own duty' *privesiti naša pečat* 'it is necessary to affix our seal' (the last example was cited by Timberlake 1974: 130). They constituted a pattern of use for the nominative object and were characteristic for specific text sections and standardized for chancellery language. Especially for the later period, it is difficult (or even impossible) to identify all such formulae or to say how productive they were (because, for instance, one of the elements could have changed). However, their use influenced the preservation of NPICs in the later period. The use of the nominative instead of the accusative (which was also possible) was motivated by the formulae themselves and not by syntactic or morphological reasons. In some of these formulae, the nominative object changed to an accusative (in texts from the 17<sup>th</sup> c. onward, *ruka priložiti* was used frequently with an accusative *ruku priložiti*), but in some formulae, the preferable nominative object marking was saved (so, e.g., *isprava učiniti*).

Another example was also mentioned in Krys'ko (1994), where he analyzed the GVNP (documents from Novgorod and Pskov) exemplifying some tendencies. The formula *tivunъ deržati* 'to keep the governor's assistant' was preserved for a long time with the nominative marking. But the formula *slati Novgorodtca* 'to send a Novgorodian' took the accusative even in the 13<sup>th</sup> c., probably due to its connection to the genitive for negation, whereas the word combination *deržati Novgorodetsъ* 'to keep a Novgorodian' was preserved with the nominative marking until the 13<sup>th</sup> c. Another combination that differentiates the preferences for the choice of the nominative or the accusatives *i.e.*, animate & inanimate, for example, in the phrase *slati osetrnikъ* 'to send a sturgeonist' (a man who collects taxes for the fishing of sturgeon), always used the nominative or the accusative as in *slati medovara* 'to send a mead brewer' (The Letters, #2, 3, 14). On the other hand, in some letters (#6, 9, 10, 15) both phrases took the accusative case for the object.

The preservation of some of these formulae and their frequent use of NPiCs could also have been influenced by the tendency to use the nominative instead of the accusative in 'figura etymologica' such as *služba služiti, pašnja pachat*'. It seems reasonable to suppose that exactly these factors (with a pragmatic nature rather than a syntactic one), along with the contamination and parallel existence of different possibilities for the use of the nominative object, helped to preserve NPiCs in these particular contexts.

Moreover, it seems very important to also take another factor, which could be called 'register variation due to interference processes', into account. For example, on the one hand, the replacement of the -ъ form, which was inherent in the Novgorod dialect, by the -а form, a characteristic of the standard Old Russian language, was one of the rules that allowed the people of Novgorod to 'turn their dialect text into a satisfactory standard text' (cf. Zaliznjak 1987: 130). On the other hand, some examples of an accusative with the -ъ form in the official sources that do not fit into the framework of constructions traditionally acceptable in book language, such as *poslati posolъ* 'to send an ambassador' as found in the *Novgorod edition/correction*, clearly demonstrate the intrusion of dialectal features into standard Old Russian (Krys'ko 1994: 96).

Another important fact (cf. Dunn 1978: 81) is that NPiCs and the dative + nominative construction (*i.e.*, without an infinitive) are linked with each other, as in following example: *a samomu* (DAT) *grivna* (NOM) *kounъ* (RP, Sinod.sp). In fact, even in earlier examples, one finds sentences with a nominative + dative and sentences with NPiCs (*emu* (DAT.) *vorotiti* (inf.) [...] *a za strougъ grivna* (NOM) (RP, Sinod.sp) in the same text. Moreover, there are very few

examples of an accusative under the same recurring conditions; it seems that the use of the accusative is more or less ‘undetermined’. This argument seems to reinforce my hypothesis of the co-existence of two different original nodes (rules; for NPiCs and APiCs), with the case variation being a result of the overlap of these two rules.

A detailed examination of the examples also showed that different lexical units (patterns) that might differ from text to text and from time period to time period have to be taken into account. So, for example, in the text of *Uloženie* (1649), the word *volja* ‘freedom’ appears four times as a nominative and just once as an accusative; in another text, that of *Sudebnik*, this word appears in most contexts as an accusative (4:1). The word *uboitca* ‘killer’, ‘murderer’ is often used in the accusative case in the text of *Uloženie* with an independent infinitive. However, if we look through the entire text, the number of forms in the nominative and in the accusative is the same in parallel contexts. Five examples given below show a masculine noun that ends in -a in the nominative (example (125)) with an independent infinitive, but only with the verb form *kazniti* (‘to persecute’), but only two examples are marked with an accusative (example (126)):

(125) *I       togo       uboitca,                               za to uboistvo       kazniti       smertiu       že*

and       this       murderer - NOM.M.SG   for this homicide   to-execute - INF   death-INS

‘and this murderer must be executed for this homicide with the death penalty’

(126) *I       togo       uboitcu                               samogo       kazniti       smertiu       že*

and       this       murderer - ACC.M.SG   himself       to-execute - INF   death - INS

‘that this murderer must be executed with the death penalty’

Therefore, as shown above, this case variation in the history of Russian is a complex phenomenon, and it is necessary to examine in detail the various examples and similar constructions to attain a correct explanation and to assess the factors that possibly influenced the choice of the construction. The possibility of free variation in some rare cases cannot, however, be completely excluded.

## 5.9. Summary

Comparing the texts from the later Middle Russian period (Sud.1550, Sud, 1497 Ulož., Pos etc., for details, see the Appendix) it can be claimed that, generally, APiCs were less frequent in the later periods. Although the predominance of NPiCs over APiCs could not be confirmed in all texts, one can certainly see that the use of the canonical accusative object marking was gradually emerging.

By using the methods of a multifactorial analysis of variance as well as binary regression (following the example in Gries 2015), the intra- and extralinguistic effects that could have been significant in determining case alternation in the strategies of object marking were investigated. Evidence strongly pointed to the conclusion that the choice of nominative or accusative constructions was not random in different time periods, and that different tendencies in the use of nominative or accusative case marking for the noun in the object position could indeed be identified. This choice was predicted by different structural factors such as (1) presence or absence of the dative logical subject (DatS), (2) the pre- or postverbal position of the object NP with respect to the infinitive verb and the pre- or postobject position of the dative subject with respect to the object NP; and (3) the semantics of the predicate. Moreover, this analysis demonstrated how recent corpus-linguistic methods can be used to discover some of these factors and to analyze their interactions with each other; thereby measuring their predictive power with respect to the choice of the construction. Another result was that, after statistical evaluation of data from different text types, dialectal zones, and historical stages, certain micro-changes in the object licensing strategies for different time periods that could not be simply explained as an issue of stylistic choice became clearly visible.

Because the findings of the present study did not only rely on descriptive statistics, but also on inferential statistics (provided by the logistic regression test,  $\chi^2$  tests, and multifactorial analysis), this study helps to generate a sufficiently representative sample for each historical period and text category and, at the same time, fits the model that conforms to this data, and remains relevant for this linguistic phenomenon. It becomes evident from this study that this infinitival construction with a noncanonical nominative object is a more complex topic than hitherto assumed. The choice of noncanonical nominative marking or canonical accusative marking was not always determined by only one factor (as assumed, e.g., in Babby 1994, with respect to DatS), so it cannot be interpreted as a rule-driven phenomenon at all. I have shown

that there was also an overall diachronic tendency toward the use of noncanonical nominative marking in SeCs at the expense of the use of NPiCs, which in fact exhibit a diachronic decrease. This tendency has been observed to be a stepwise process that was realized for different language levels and time periods. In the Old Russian period, the choice of construction interacted with the presence or absence of DatS and its position regarding the object NP, as well as the preverbal position of the object NP itself. However, in the Middle Russian period, only the position of the DatS was still significant, as both APiCs and NPiCs occur with the preverbal position of the object NP, so this factor ceased to be a predicting factor for the choice of construction. On the other hand, contrary to assumptions in the literature (Dunn 1978), the lexical content of the verbs contributed some selectional restrictions for the construction, and according to the qualitative analysis, some of most frequent verbs occurring with the nominative could be identified and, likewise, others preferring to occur with the accusative. Moreover, an interesting shift was observed in the use of the three most frequent verbs in NPiCs in the Old Russian period, that is, *dati* ‘take’, *vzjati* ‘give’, and *znati* ‘know’; however, in time this spread to other types of verbs like *platiti* ‘pay’ and *(po)salti* ‘send’.

Together with the help of the different statistical corpus-linguistics methods, it was possible to simultaneously test different independent variables and to analyze their interactions with the choice of the construction, whereas the monofactorial approach or the exclusively qualitative approach could not have yielded this result. Some of these results are useful for a further qualitative analysis. Moreover, it was possible to identify the time periods of the micro-changes in the application of rules and the change in the tendencies to use the accusative or the nominative variant. It turns out that the most significant changes took place within the nominative phrase.

First, as was proposed in previous studies and now proven in the present study, both variants were already attested to in the earliest Old Russian texts in the same syntactical environments. However, the use and variation in object marking cannot be explained solely as a rule-driven mechanism or as a simple stylistic variation (as supposed in Timberlake 1974), but rather as a tendency in the use of one or the other variant (a hypothesis suggested in Dunn 1978). Moreover, comparison of NPiCs and APiCs led to the conclusion that a difference in the behavioral properties of these two variants exists. It does not seem plausible that, at the beginning, these two variants would have been understood as interchangeable.

Second, the evidence of quantitative and qualitative corpus analysis indicates that the use of NPiCs was not only restricted to the chancellery language or to the Novgorod region, but also existed in Moscow and South Russia.

Third, the development of the constructional variants mirrors the mixture of different factors and constructions running parallel to one another with semantic or structural affinities that also produced different patterns of nominative marking. It was shown that the choice of NPiC was not always motivated by the syntactic environment, but also by the semantics of the verbs and nouns or for pragmatic reasons.

The qualitative and quantitative analysis shows that the origin and development of the construction can only be explained as contamination by other parallel constructions and the rise of other phenomena (i.e., the category of animacy and its realization in the history of Russian as well as the expression of modality).

In addition, corpus-linguistic analysis has demonstrated a micro-change in the correlation between case-marking strategies and the factors and variables that influenced the choice of the constructional variant. This would not be possible without the systematic analysis of data by using multifactorial statistics. The results demonstrated that, in the earlier Old Russian period, the choice of the NPiC was more or less motivated by the presence of the noun in the dative and a relatively free word order (pre- or postverbal position with respect to the infinitive). However, if we compare the behavioral properties associated with APiCs, it is clear that the accusative object almost always stays in the postverbal position and the nominative in the preverbal position. Moreover, the accusative was always used without an associated logical dative subject. This fact also indirectly supports the idea of the independence of two original rules (which produce these two constructions). The emergence and frequent use of APiCs from the end of the 14<sup>th</sup> c. onward correlates with the rise of the category of animacy and the regulation of the case-assignment strategy in Russian (see Krys'ko, 2006), as already discussed in Chapters 2 and 3. On the other hand, the disappearance of NPiCs has to be seen as the development of constructions expressing a modal meaning with dependent infinitives and modal verbs that, because of their structural and semantic affinities, were already discussed, for example, in the study of Jung (2010).

Another interesting fact is that, in the later period, in both NPiCs and APiCs, the preverbal position was preferred and, at the same time, constituted the marked word order. Furthermore,

it becomes more or less insignificant whether a logical dative subject is present in the construction or not.

The more exact qualitative analysis of individual contexts and special cases has also shown that, in later times, NPiCs frequently occur by analogy, so that a reconstruction of the systematic syntactic rule can be proposed.

In summary, the proposed approach has proven to be successful, especially for such diachronic investigations of language variation and language change processes, as well as for register variation over different time periods. It could be shown that, in the Old Russian period, there is a juxtaposition of different construction types of NPiCs, which competed with one another and had certain tendencies in their application. There is a great upheaval in many places from the 15<sup>th</sup> c. onwards. But most of the changes currently occur in the noun phrase. The new forms solidify to such an extent that they are grammaticalized. Many of these processes are adapted to the parallel development of the category of animacy and transitivity in Russian: the nominative object moves to the right into the postnominal group or is replaced by the usual accusative, so that the verb agrees with the noun.

## 6. Conclusions

The objective of this study is to develop an alternative explanation for the case variation in object marking from a diachronic perspective in the so-called nominative object constructions attested to in Old and Middle Russian based on the available corpus-data. For this purpose, the study reports the results of the first extensive quantitative corpus-based analysis of the Old and Middle Russian chancery language that used a specialised subcorpus, which is a part of the RRUdI, that is, the CHaRLi subcorpus. The main focus of this thesis was to uncover the underlying factors that caused the case variation in object marking and to explain the strategies of case marking in terms of the Competing Grammar Approach by applying a combination of different statistical corpus-linguistic methods and a qualitative analysis of the material. The case variation in object marking was analyzed as a correspondence between different syntactic patterns (constructions) that developed as a result of competing rules and diachronic changes in grammar. Within the new corpus-linguistic methods, some of the hypotheses about the origin or correlation between linguistic and nonlinguistic determining factors were tested, and an adequate multifactorial model has been developed. I have also offered a proposal to account for the transformational changes in such constructions.

The main results of the qualitative and quantitative corpus study have already been summarized in Chapter 5. In this last chapter, I want to establish a set of generalisations that might account for the development of object marking in such constructions as a whole. Therefore, in this chapter, I shall propose a new generalized explanatory model that is based on the results from my empirical study of the case variation between nominative and accusative object marking in the observed nominative object construction throughout the history of Russian. Subsequently, I shall also outline a possible direction for future analyses. In order to do that, I shall reiterate the lines of argumentation in the present thesis.

In Old and Middle Russian, different modal and nonmodal infinitival constructions existed that show a kind of nominative object marking unusual for modern Russian (cf. Chapter 2), whereas the animate participant often receives dative marking (the so-called nominative object constructions). This phenomenon attracted much attention, and in Chapter 2, all the relevant properties of such constructions and their variants were presented. Chapter 3 began with a general discussion of the notion of noncanonical versus canonical object marking within recent case theories. The term ‘noncanonical’ object or subject marking is often used to compare nearly parallel constructions in different languages and to explain the case marking strategies of object



and subject crosslinguistically. There are different parameters or factors that can be used to distinguish the constructions, including canonical versus noncanonical object/subject marking in different languages. The variability of these parameters makes it difficult to compare them. In my study, I also argued that, from the diachronical perspective, a closer inspection of text evidence shows that the notion of noncanonical case marking is not at all useful. First, in Old and Middle Russian texts, different types of construction have been attested to with a certain regularity that do not necessarily contain an infinitive predicate and in which, nevertheless, an inanimate object participant is labeled by the canonical subject case (nominative), while the animate participant receives a dative marking. However, this case marking does not appear as noncanonical at all for the Old Russian and also the early Middle Russian period (until the 15<sup>th</sup> c.), but rather proves to be a case-marking strategy that was very typical (or ‘canonical’) for this period. Moreover, some of the factors suggested to be valid for Modern Russian constructions cannot be applied to historical constructions. In the diachronic survey, it was also shown that there are a lot of cases that cannot be interpreted as strictly unambiguous but are instances of ‘overlapping’ or doublets. So, in the Old Russian period, some verbs could appear simultaneously with different cases (see Krys’ko 2006 and my own examples in Chapters 2 and 3); also, a reflexive pronoun could appear with both object and subject NPs. Therefore, these factors are not valid for the historical data in the same way as for Modern Russian (see Chapter 3). All this also caused different types of variation in the language, especially during the evolutionary process. The phenomenon and all the types of construction considered to be nominative object constructions in Old and Middle Russian have been treated in Chapter 2.

In Chapter 3, the most relevant result of previous studies on this phenomenon were discussed. However, it was also shown that, in the various studies, there is a great deal of disagreement and overlap in the classification of the syntactic status of the nominative argument as a subject or object, also about the origin of these constructions in Russian. Three main interpretation models can be distinguished: the traditional approach, Timberlake’s theory (these two are often considered to be contradictory), and a third model that is nonetheless (given the preceding comment) a mix of these two approaches and has mostly been suggested in typological studies, for example by Ambrazas (2001), Jakab (2003), and Kwon (2009). This third interpretation seems to be the most appropriate for the phenomenon as it can explain different processes with respect to different historical periods. So, for example, the origin of the NPIC can be explained within the traditional interpretation as an evolutionary process and a transition of the nominative subject-to-object marking. This explanation derives the NPIC from the existential/possessive

construction with a purposive adjunctive clause (Potebnja 1958). The variation in object marking is explained as a result of the rise of accusative case marking for the direct object in the history of Russian and the emergence of the category of animacy (Krys'ko 1994, 2006), which is dated to no earlier than the end of the 14<sup>th</sup> century. From this period on (end of the 14<sup>th</sup> – 15<sup>th</sup> c.), the evolutionary process suggested by Timberlake (1974) can be applied. Timberlake suggested that, during the Middle Russian period, constructions with a nominative object were reanalyzed, beginning with a change in the application of rules from a syntactic to a morphological object marking rule (Timberlake 1974).

Nevertheless, although all previous studies provide various valuable theoretical insights that have been partly integrated in the present thesis, there are two reasons for conducting a new investigation of the phenomenon: First, the previous studies substantiate their theoretical considerations with selectively presented data (often using examples from Timberlake 1974 or one of the other traditional studies) and/or base their generalizations on data from single texts. This did not allow a continuous and more generalized diachronic analysis and led to solely monofactorial analyses. Second, the issue of the co-existence and variation in the use of NPiCs and APiCs during the whole history of their existence in the written language was still not properly explained. In recent works, this case variation has been analyzed as interchangeable variance between two constructional types, while the fact that, in some cases, the variants overlapped was mostly ignored. This assumption, however, is neither supported by a closer analysis of the historical material nor by the contexts in which both variants could appear.

As shown in Chapter 5, both constructional variants (NPiC and APiC) show certain similarities with respect to what drove the change, but they also differ in their structural preferences and were not completely interchangeable. In Chapter 5.3, it was shown that, in the Old Russian period, the use of the nominative did indeed correlate with the appearance of the logical dative subject in the same clause. This also supports the hypothesis about the origin of modal NPiCs in possessive constructions (see Potebnja 1958, Jung 2010). On the other hand, during the history of their co-existence in the written language, both constructions developed so as to reduce their degree of variable underspecification, thereby becoming more restrictive with respect to their licensing contexts. Starting from the end of the 14<sup>th</sup> c., the use of the nominative or accusative in the object NP seems to be driven by different structural factors and the morphological qualities of the elements of the construction. Their qualities limitations can be explained by the development of grammatical categories such as the accusative case marking

for the direct object (Krys'ko 2006), and transitivity, modality, etc. Furthermore, the parallel development of the category of animacy with its specific case marking regularities (nominative–accusative or genitive–accusative) facilitate fluctuations between different construction types. Therefore, the formation of case-marking strategies based on the morphological criteria between two competing developments and different constructional variants also led to a stable variation in nominative object constructions.

As noted before, a closer inspection of the distribution of different construction types showed that the use of the accusative versus the nominative was not random and seemed to be predicted by different factors; however, until the disappearance of the nominative constructions from the written language, overlapping cases could still be registered.

It was shown that, in the Old Russian period, nominative object constructions were not strictly used only with independent infinitives but could also appear with imperatives or finite verbs (SeCs-2). This observation, however, does not imply that the use of NSeCs-2 was common for the Old or Middle Russian period. Rather, it shows that, at the beginning, the use of nominative object marking was not restricted to PiCs. Moreover, the dialectal data show that it would be incorrect to assume that the use of nominative object marking was ever restricted to PiCs (cf. Chapter 5.7.2).

According to the empirical data, the idea that, originally, morphological restrictions (only -a class feminine nouns) or structural restrictions (only in preverbal position of the object NP) led to the use of nominative object constructions had to be rejected. Examples from the earliest Old Russian sources contain unambiguous masculine nouns in the nominative and, as shown, the postverbal position of the object NP was also common for the Old Russian period.

Also, the preliminary analysis of the verb semantics showed some restrictive patterns that could be identified for the Old Russian period. Moreover, especially in the Middle Russian period, the use of nominative object marking was strongly restricted to certain classes of verbs and nouns.

It is still difficult to answer the question about the geographical restriction of the early use of these constructions. The evidence from the later period (Middle Russian and modern dialects) showed that the most active use of the construction must be dated from the end of the 14<sup>th</sup> c. until the end of the 16<sup>th</sup>. The use of PiCs and SeCs was widespread in the North, South, and

Central Russian regions. It was found particularly often in the Moscow documents regarded as hybrid texts from the later 16<sup>th</sup> until the beginning of the 18<sup>th</sup> c. The gradual disappearance of nominative object constructions from the written language, however, must have started back in the 16<sup>th</sup> century and continued until the end of the 18<sup>th</sup> century when nominative object constructions start to become a feature of the North Russian dialects. Their preservation and use in the later sources can be explained as an artifact of the chancellery language.

In Chapter 3, different interpretational models of this case variation as suggested in the previous studies were summarised, with the conclusion that both the traditional approach and Timberlake's approach could be applied for different time periods. Thus, I share the traditional interpretation of the origin of the NPiC in the existential possessive construction and the original subject status of the nominative NP (for details, see Chapter 3)<sup>85</sup>. Within this approach, I also assume a category shift of the nominative argument in some environments, with different degrees of subject or object properties, from subject to object and, thus, from one type of construction with a nominative NP to another type. On the other hand, a shift in the semantics of these constructions can also be recorded, that is, 'from possessive to modal' (as proposed by Jung 2010) and also from modal to nonmodal<sup>86</sup>, or imperative, semantics. More generally, one can also assume that the case variation in object marking and the disappearance of the NPiCs from the written language is a result of the alignment of the semantic roles (agent and patient) and the establishment of case marking by nominative and accusative. Moreover, the results of my study also support the assumption made by Krys'ko (2006) about a later development of the direct object marking with the accusative. This interpretation is based on the idea of the existence of one rule changing in its application (or nature) over time. However, this explanation ignores the fact that the two constructions show structural dissimilarities, especially in the earlier period (in Old Russian). This interpretation only partially explains the 'causes' of the reanalysis and cannot account for the intricacies of the behavior of PiCs (i.e., their context sensitivity and their interaction with the development of other grammatical categories, etc.) in

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<sup>85</sup> That is, that originally, the nominative represented the grammatical subject, and that the infinitive in such constructions was a so-called purposive dative of the action of the nominal (an Indo-European feature). This hypothesis is supported by the fact that constructions with a nominative plus infinitive (expressing a purpose) exist in other Indo-European languages (Stepanov 1994, Krys'ko 1994). Also, examples from Lithuanian (see Ambrazas 2001: 405–406) are regarded as evidence that a nominative subject in infinitival clauses existed and was used in early Slavonic as well. The subject status of the nominative, however, was reanalyzed in later stages, due to processes of grammaticalization.

<sup>86</sup> The shift from modal to nonmodal was not discussed here in much detail. It is an obvious issue for future research.

diachronically related grammatical rules that morphologically and syntactically differed in their application and also allowed an overlapping use of NPiCs and APiCs in the same syntactic environments. It became evident in the present investigation that this infinitival construction with a noncanonical nominative object is a more complex topic than hitherto assumed. In the empirical part of my analysis, I also demonstrated that the phenomenon of the ‘nominative object construction’ in the history of Russian was not always unambiguous and that although one can identify some tendencies in the use of the nominative or the accusative construction it is difficult (or rather, impossible) to formulate a ‘unique’ rule for all patterns that applies in all periods. Furthermore, it does not seem possible to explain the disappearance of the ‘old’ nominative object marking from the written language by simple replacement by a ‘new’ canonical accusative variant. This assumption cannot explain why the old variant was still preferred until the construction completely disappeared from the written language and why the nominative marking has been preserved in some dialects until today. Another result of the above statistical evaluation of data from different text types, dialectal zones, and historical stages was that some microchanges in the object licensing strategies in different time periods became evident that cannot be explained as simply stylistic. On the other hand, both traditional explanations presupposed that APiCs were the later development; but even this fact seems difficult to prove as both variants appeared simultaneously in the earliest written sources.

Therefore, I propose another way to look at this phenomenon and to give a possible explanation for this case variation from a diachronic perspective based upon the Competing Grammar Approach/Hypothesis (CGA or CGH; Kroch, 1989). This approach has been applied to diverse languages in order to explain diachronic change and variation. The continuation of this idea is that language change can be statistically identified and that the frequencies of two variants (for texts from different periods of interest) can provide information about the competing grammars with their respective grammatical rules. Kroch’s theory only considers the case that two rules have the same initial node. If this also applied to the Russian nominative object construction, no overlapping of these two rules could occur because, according to Kroch’s approach, the two rules are mutually exclusive. Moreover, the fact that the ‘old’ variant, rather than the ‘new’, innovative variant, eventually turned out to be the favored one would remain unexplained, as this approach does not explain variants as mere doublets. By contrast, it is possible in the approach of the present study to explain such doublets simply by register variation, a language-contact situation or/and a dialectal feature.

Because of these problems, I decided to test the idea presented by Zimmermann (2012) that competing grammars can contain both ‘independent’ rules and rules that are dependent on specific conditions. Under this hypothesis, two competing rules do not necessarily arise from one initial node, but can be independent of each other; again, this would then be a way to cover the fact of overlapping forms of two rules. Zimmermann (2012: 315) presented an analysis of relative clauses in Old English in this way. In his explanation of the concepts of the ‘independence’ of a rule and the ‘conditioning’ of a rule, Zimmermann (2012: 316–319) assumed that, from a diachronic perspective, the competition between two rules and the variation of forms do not always arise from the strict mutual exclusiveness of two rules that would also exclude the overlapping of two forms (or constructions, as in my study). He rather suggested that the fact of two rules overlapping in some cases means that ‘two formal devices can be employed in exactly identical contexts, i.e. they are independent’ (2012: 317). This fact facilitates the emergence of the third rule that is then based on the combination of the two original rules. The two rules can be in competition until one of them disappears. Moreover, in the evolutionary process, the application of both rules could become more restrictive, so that the overlapping forms also become ‘sporadic’ (Zimmermann provides examples from Old and Middle English). Therefore, diachronically, both mechanisms are possible: one that is based on the mutual exclusivity of two rules and another one, which has often developed from the first mechanism, that is based on the independency of two rules.

The aim of my study was to provide a unified account that would be applicable to the various forms of nominative object construction. To achieve this goal, I postulated that there are two different (constructional) prototypes that also developed different syntactic patterns. The choice of the nominative or accusative object was predicted by different intra- and extralinguistic factors, which were investigated in the present study. As was demonstrated in this work, the variation in the case marking in those infinitival constructions existed continually during the entire existence of such constructions in the history of Russian; the variation is, depending on the structural or the lexical context, a more or less salient feature of case marking. Also, in some cases, a certain ambiguity in the application of the two rules appears as an intermediate stage in the transition of the two rules and resulted in doublets. Therefore, some verbs could occur with both cases (cf. Chapter 3.3).

As the basic proposal of this work was formulated in the sense of grammar competition (as proposed in Chapter 3.4), the main aim was to present an explanation in terms of this framework

by using empirical facts regarding the actual distribution of nominative versus accusative variants and to give an overview of different constructional variants and their behavioral similarities and differences. In order to justify the existence of two independent competing rules that produced the third rule by using empirical evidence, this study was built up as an extensive, quantitative, stepwise, corpus-based analysis of different constructional types with the accusative and the nominative (cf. Chapter 5). Thus, with recent statistical methods and tools of corpus linguistics, this instance of a diachronic trend in language variation could be evaluated, and the microchanges in the development of different syntactic constructions could be tracked. As a special interest of this study lay in the correlation between the choice of the canonical versus the noncanonical object marking and different factors influencing this case variation, the development of and change in the object marking in specific modal infinitive constructions were analyzed with the help of statistical corpus linguistic methods. Two main structural factors causing the variation were analyzed in more detail: the position of the object or subject NP with respect to the predicate and the presence or absence of the logical dative subject (DatS). The effects of these two factors on both constructions proved to vary and also changed over time. According to the corpus data, in NPiCs, not only the preverbal position of the object NP, but also the preverbal position of the subject NP (in the dative) were preferred in the later period, whereas it was not relevant in the Old Russian period.

According to the empirical data, one could speak of two coexisting rules that can be interpreted in the following way: the noun in the NPiC inherited its subject properties from another construction through reanalysis and contamination by parallel modal infinitival constructions with a nominative and a dative. The subject properties that the nominative NP inherited were the lack of case marking, a preverbal position, and a logical dative subject as well as a lack of agreement.

The APiC, on the other hand, gained its subject properties by analogical extension and therefore also preferred the preverbal position and a logical dative subject, but only in the later period. The inherited properties reflect the source of the APiC construction, which was doubtlessly the NPiC. The APiC reflects subconscious changes made by the community of speakers. The resulting existence of two incompatible rules in the later period eventually enforced the loss of the APiC and can be interpreted in terms of the CGH as a ‘long-term syntactic drift’, whereas the long-term stability of the variation in object marking was supported by differences in social register and dialectal contact, but also by structural similarities between the NPiC and the so-

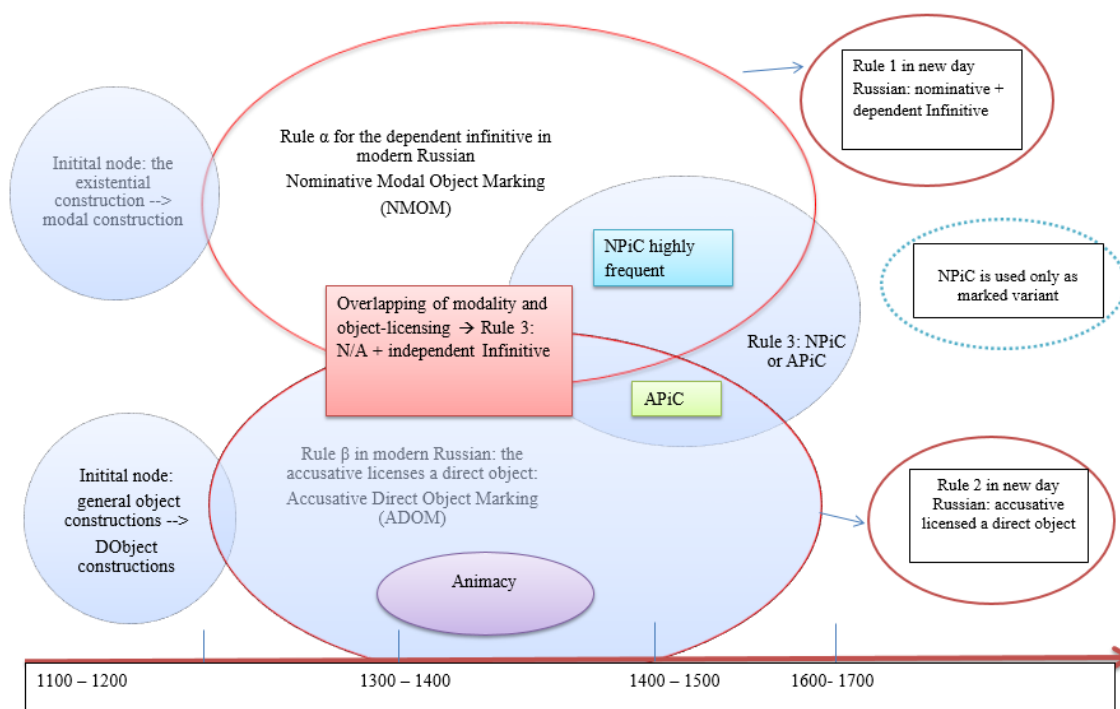
called dative + infinitive modal constructions. It seems that, for Russian, it is more suitable to speak of a competition of diverse grammatical rules that produced variation and competing features in the grammatical structures (for a discussion, see Pintzuk, Tsoulas, Warner 2000: 12–13 and Roberts 2007). Thus, it is not the complete grammar that is in competition, but only features of grammar that come into variation.

The result of the comparative analysis of NPiCs and APiCs implies that they might even have developed simultaneously, as both appeared in the earliest Old Russian sources. On the other hand, the use of these variants was not mutually exclusive, and both could appear in the same syntactical environments without necessarily being restricted. However, the results of the multifactorial analysis also showed that, with time, the use of these two variants determined the factors influencing their occurrence and conditioned the choice of one or the other variant. Moreover, a more-detailed qualitative analysis of the use of both variants, especially in the Middle Russian texts, demonstrated that the distribution of NPiCs and APiCs as well as of the overlapping forms became more and more restricted regarding different factors.

In the figure below (Figure 46), a schematic nested model is presented to show the evolutionary process and the correlation of the two competing rules in the history of Russian starting from different initial nodes, which overlapped in their application and produced the third rule. This third rule, which involved constructions with an independent infinitive and a nominative or accusative noun in the object position, developed its own ‘history’, and the choice between the constructional variants became more and more conditioned, that is, restricted, by different factors. Therefore, it seems possible that the overlapping happened in the surface syntactic structures with independent infinitives (i.e., in PiCs):



### Model of the nested competing rules (in the case of the nominative object construction in Russian)



**Figure 46** Model of nested competing rules

The NPiC/APiC variation is the result of a conditional relationship between two parallel and independent rules,  $\alpha$  and  $\beta$ . These two rules had different initial nodes. The nominative object constructions were generated by the  $\alpha$ -rule, which used a form of nominative argument in specific modal infinitive constructions with a dative. The accusative object constructions were generated by the  $\beta$ -rule, which set up the accusative as canonical for the verbal predicate. The parallel nature of the innovations produced an ambiguity on the surface of some syntactic structures and led to the overlap of rules especially in the PiCs (and in some cases also in the SeCs). This overlap can be formulated as  $\alpha$  (*Nominative Object Marking in Modal constructions* – NOMM)  $\cap$   $\beta$  (*Accusative Direct Object Marking* – ADOM), which is represented in the alternation of the PiCs and partially in the SeCs. The coexistence of two initially independent rules and their overlapping led to the emergence of conditioning factors provoked by the competition between the two constructions and resulted in a change in their application. The two rules underwent several changes, and this also had an influence on the use of the competing features of the two variants. In the later stages, these two rules were modified, and, due to several changes, the use of the nominative and the accusative appears to have become more rule-driven with time or conditioned by different morphological and semantic features. The use of the NPiC began to be limited to sentences with an independent infinitive as soon as the

accusative adopted the function of the direct object (and was used with finite verbs or dependent infinitives). Moreover, in later periods, the use of the two variants was conditioned by some merely grammatical features, such as the animacy/inanimacy of the noun, or certain lexical sets of verbs (due to the emergence of the argument structure of the verb), etc. However, even in later texts, there are instances of overlap. So, the wide use of diverse infinitive modal constructions with dative + nominative and by + infinitive and the developing differentiated object marking strategy in the early Old Russian period must have become an important condition for the development of innovations in the syntactic system.

The empirical evidence supports this view, and qualitative analysis of data also shows that these two rules overlap in the early and the later periods. In the light of this hypothesis, the use of three rules can be exemplified from the Old Russian sources as (all following examples was taken from VK 1130-1156):

(1)  $\alpha$  rule – Nominative Object Marking in modal constructions – NOMM:

- (127) *im, i eouanhel'ju cělovati, i dora*  
 they - DAT and gospel-ACC.F.SG to-kiss - INF and bread - NOM.F.SG  
*jasti*  
 to-eat - INF  
 'It is necessary for them to kiss the gospel and to eat [unleavened] bread'

(2)  $\beta$  rule – Accusative Direct Object Marking – ADOM:

- (128) *dostoit li re(č) glin'nou s̃soudoy molitvou*  
 fitting-3.SG. COND say clay pitcher blessing - ACC.F.SG  
*dajati*  
 to-do - INF  
 'Is it fitting to bless the clay pitcher'

(3)  $\alpha \cap \beta$  rule 3:

- (129) *kako d'ržati im̃ opitem'ja*  $\cap$   
 how to-hold - INF they - DAT; penance - **NOM.F.SG**  
 'how they should do penance'

*preže dati opitem'ju*

before                      to-give-INF      penance - **ACC.F.SG**  
 ‘before they must do penance’

Or, as in the following example, in which the nominative occurs instead of the expected accusative:

- (130) *dostoit-li*          *popou*                  *ženě*                  *mltva*  
           should            priest - DAT            wife                  pray - NOM.F.SG  
           *tvoriti*            *vsjakaja...?*  
           to-do - INF        any - NOM.F.SG  
           ‘should a priest say any prayers for his own wife’

The corpus data demonstrate that both rules competed until the NPIC disappeared from the written language (end of the 17<sup>th</sup> – beginning 18<sup>th</sup> c.). Moreover, my analysis of the behavioral properties of NPICs and APiCs and their SeC variants in the Old Russian and then the Middle Russian periods showed an undeniable change in the distribution of variants. That the NPIC and APiC have often been found in the same context (thereby overlapping in their use) was not attested to frequently (or even decreased) in the Middle Russian period (starting from the 15<sup>th</sup> c.). Here, overlapping forms occur very sporadically, in comparison to the Old Russian period. This fact suggests that, according to my data, from the end of the 14<sup>th</sup> c., the use of the two constructions was driven by the conditioning factors described above (structural factors: the position of the subject and object NP with respect to the predicate, the presence or absence of the DatS, and the semantics of the verb; but also external factors: text category and geographical restrictions), and their distribution then became complementary in most cases.

The results of the multivariate analysis also support this assumption, as it was shown that the use of the NPIC or APiC (as well as their variants) seems to have been conditioned by factors that were irrelevant for the Old Russian period. The analysis showed that, in the Old Russian period, the use of the NPIC seemed be less restricted by any factors (type of clause, type of verb, presence or absence of any elements, etc.). This nonrestrictiveness weakened over time, and in later periods, the choice of the NPIC or APiC starts to be conditioned by different factors. All this probably induced the ‘complementary’ distribution of the two variants, but still there are examples where both forms overlap, until the NPIC disappears from the written language. This fact again justifies my hypothesis that the APiC and the NPIC had different initial nodes,

because otherwise, cases of their overlapping would have had to be absent from the language completely. All in all, these findings support the claim that this type of case variation in the history of Russian can be analyzed as a consequence of the overlapping of two independent rules that, at the beginning of their existence, were not in a complementary distribution with each other.

Thus, on the one hand, the present thesis has shown the advantages and also the limitations (cf. Chapter 4) of corpus linguistic methods in diachronic studies. In particular, the new statistical methods and sources of corpus linguistics in diachronic linguistics can shed new light on a problem like the phenomenon investigated here, which had been described repeatedly by traditional philological methods since the 19<sup>th</sup> c. On the other hand, within the Competing Grammar Approach, an alternative path for the interpretation of language variation and language change can be followed. This analysis suggests, in a more general sense, that nominative object constructions need not necessarily be analysed as constructions with a noncanonical object marking and should not necessarily be explained in contrast to a canonical accusative object marking.

There are still several issues to be investigated more closely in future research on this phenomenon. The most obvious task to be undertaken is the analysis of the transition from modal to nonmodal semantics in infinitival constructions. In order to evaluate more precisely the analysis of the Competing Grammar Hypothesis, one should also analyze the quantitative and qualitative distributions of the overlapping forms. Finally, a detailed analysis of the diachronic data of the nominative object constructions with respect to the data in modern Russian, conducted within the same framework, would also provide valuable insight into their geographic distribution, their dialectal status, and their possible connection to lexical sets of verbs.

## APPENDIX: Examples and comments on the use of PiCs in selected texts

### I. Hybrid texts.

#### 1. Voprošanie Kirikovo. (VK) [The Questions of Kirik] (Index 1.7 in Section 5.2)

There are two copies of this text from the 13<sup>th</sup> and 16<sup>th</sup> c. Both copies have been analyzed in detail in Nikolaeva (2012). She assumes that this text should be considered as a separate genre of the Old Russian church and business writing, as the manuscript incorporates both the tradition of the canon law texts and nonformal language elements. Moreover, the text includes parts about church sacraments and domestic preoccupations; this implies that it is impossible to identify it as a unified genre of a written resource. Therefore, I classified this as a hybrid text for this study and in CHaRLi.

Some of the earliest attestations of NPiCs, APiCs, NSeCs, and ASeCs have been found in this text. According to Zaliznjak (2004: 156–157), the distribution of APiCs and NPiCs was not random, but was based on the structural properties of the components of the sentence. He argues that the nominative was chosen if the infinitive was not dependent on any matrix element and with modal predicates: *dostoit'* ‘it is fitting’ and *l’ze* ‘it is possible’, which he illustrates with the following examples (the sources of the following examples are documented in Zaliznjak 2004: 156–157):

*dora jasti* ‘to eat the gifts’

*dati opitemja za* ‘to assign a penance for that’

*dostoit’ li popu svoej žene molitva tvorit’ vsjakaja* ‘Does a priest need to say any prayer for his wife?’ and others (for example (86) cited in Chapter 3).

The accusative was chosen if the infinitive was dependent on modal predicates like ‘*chotjeti*’ ‘want, wish’, *veliti*, *poveliti* ‘to order’ as in the following examples:

*aže velit’ bljusti nedelju i soubotou* ‘then you should order to keep the weekly and Saturday sabbath’

*koli choteče molitvu tvoriti bolnomu* ‘if somebody wants to say a prayer for a sick person’

In addition, these texts generally contain just a few examples of PiCs; most of the examples are SeCs. Most of the PiC examples in this text occur with the lexeme *molitva* ‘pray’, however, with a different case and depending on the copy of the text; in both examples from the copy from the 16<sup>th</sup> c., NPiCs were found:

*Tvorit’vsem molitva* and *molitva tvoriti vsjakaga* ‘to say any prayers for all’

However, in the copy from the 13<sup>th</sup> century, the accusative is used: *molitvu dajati*.

The above examples show that the use of PiCs and SeCs in the earliest texts has an ambiguous nature, so each text needs a special detailed analysis.

## **2. Sudebnik 1497 goda. S. I. Štamm (Sud. St. 1497) [Code of Law of 1497]**

This text represents a code of law written in the Muscovite state. Examples with the nominative case prevail (Sprinčák 1939, Dunn 1978, also confirmed by my corpus analysis). Dunn found only six examples of NPiCs (but he analyzed only certain passages in the text). I found nine clear examples of NPiCs and only four examples of APiCs. The following examples illustrate some instances of PiCs and SeCs from this text:

## **3. Sudebnik (Sud.1550) of Ivan the Terrible (1550)**

This text and its various copies have already been discussed in Sprinčák (1939), Konovalova (1968), and Dunn (1978) and was also included in CHaRLi, since instances of PiCs and SeCs have been found in it. As Dunn (1978: 182) pointed out, independent from the copy of the text, the NPiCs predominate the APiCs: In the text from the 16<sup>th</sup> century, 21 NPiCs have been found and only 6 APiCs. In the later copies (18<sup>th</sup> century), there are 19 NPiCs and 7 APiCs. An example with both constructions:

*...i tomu ta votčina vykupiti; a stanet tot kupetc tu votčinu prodavati, i tem prodavtcom votčina u nich kupiti polubovno*

‘Who starts to possess that patrimony, that person you should request to buy those ancestral lands; and when the merchant sells his patrimony, this buying should be done peacefully (by a mutual agreement).’

#### **4. Lunnik. Primety po dnjam luny (Lun.) [Lunar calendar]**

This text from the 16<sup>th</sup> century (Sof. #1462) includes hygienic precepts and other advice for domestic affairs. It contains several NPICs, with a feminine noun of types -a and -i, as in the following examples:

*Rosada saditi i sejati* ‘it is necessary to plant and to prick off the seedlings’

*Svjekla saditi* ‘it is necessary to (one should) plant beet-root’

*Rosada sejati i saditi* ‘it is necessary to prick off and to plant the seedlings’

Unambiguous:

*Ino pustiti krov* ‘in this case it is necessary to let blood’

Additionally, to the above examples, there are instances of ambiguous PiCs with a masculine and neuter noun as in:

*Gumno razkryvati* ‘it is necessary to shut the barnyard’

*Mjaso izrezati v velikyj četvertok* ‘it is necessary to cut meat on the Great Thursday’

## 5. Domostroj (Dom.) [Domestic Order (book of moral codex)]

This hybrid text is a compilation of rules and recommendations on household management and advice and instructions also regarding religious and social matters. Therefore, this text is composed from different text types and also represents different “language levels”, i.e. official and colloquial language (Dunn 1978: 95). However, as argued in the very detailed study on this text in Sokolova (1962) whose conclusions also have been supported in Dunn (1978), even though most of the NPiCs have been found in the central part of the Domostroj, the NPiCs supersede the APiCs in all parts of the text and therefore are not dependent on the thematic context of the text. This means that there is no difference in the distribution of the APiCs and NPiCs depending on the thematic context and the related language level, just as in the text “Stoglav” described below. The following examples are taken from different parts of the text:

*A dora i prosfira i vsjakaja svjataja vkušati berežno.* ‘And the sacraments (gifts) and holy bread should be tasted carefully.’

*I vsjakaja estva perebrati* ‘And to taste table groaning with food.’

Sokolova also concluded that in most NPiCs, the nominative was in the pre-verbal position, with the “approximate ratio 4 ½: 1” (see in Sokolova 1962: 261).

## 6. Stoglav (Stoglav) (The Book of One Hundred Chapters)

Different authors (Sokolova 1952, 1957, 1962, P.J. Černych 1954: 286-288, and Konovalova 1968) mentioned similar constructions existing in the Stoglav (The Book of One Hundred Chapters). Thus, Konovalova (1968:83) identifies 42 examples with a nominative + independent infinitive, while Dunn only identifies 21 examples in the Kazan list<sup>87</sup>. I only found 18 clear examples.

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<sup>87</sup> “The Kazan 1 edition of the Stoglav contains 21 clear examples of the nominative-object used in an independent infinitive sentence. In two instances, the object is a noun referring to a person ...” (Dunn 1978: 197)



## 7. Sobornoe Uloženie 1649 goda (Sob. UL.) [Code of law of 1649]

Dunn (1978) concludes that in the text of Sob. UL., the use of APiCs was registered more often than NPiCs in the ratio 3:2. In the 17<sup>th</sup> century, the accusative is often used in feminine singular animate nouns as in *žena* (NOM.F.SG) ‘wife’, *žonku* (ACC.F.SG) ‘wife’ (the same examples are found in Dunn 1978: 161). There are some lexical units which are, according to Dunn, more commonly used with an independent infinitive such as the following:

*Gramota*: This word (‘letters’) or its diminutive form *gramotka* (‘little letters’) with different infinitives were found 9 times in NPiCs (in 8 instances also with DatS), whereas the APiC occurs only once.

*Otseč ruka* ‘somebody will cut off an arm’: This expression was found in 11 examples (I found only 9 in NPiCs and 2 examples with a finite verb, i.e. in NSeCs-2). Furthermore, the majority of the PiCs, the object NP follows the infinitive verb.

*Votčina*: This word (‘land prince’s estate, or patrimony’) was found 10 times by Dunn in the NPiCs, whereas I found 12 examples of which only one example is an APiC, i.e.:

*i toe votčinu odat* ‘it’s necessary to give back that estate to him’

*Cena* ‘price’: This word was found by Dunn in 5 instances of APiCs, and in 1 NPiC, whereas I found 6 APiCs and 4 NSeCs-1 and ASeCs-1 (with a dependent infinitive):

with a nominative: *i tomu cena položiti po semu ukazu* ‘it is necessary for him to put the price in accordance with that decree’

with a dependent infinitive and a nominative: *velet’ dopraviti ukaznaja cena* ‘to order to take payment at a specified price’

APiCs:

*dopraviti tu cenu* ‘to take payment at a specified price’

*vzjati cenu* ‘to take payment’ or *vzjati na nich cenu* ‘to take payment from them’

...*dopraviti bolšuju cenu* ‘to take bigger payment’

...*cenu klasti* ‘to put a price’

ASeCs-1:

*velet' na nem dopraviti cenu po ukaznoj cene* 'it is necessary to order him to take payments at a specified price' or *velet' dopraviti ukaznuju cenu dvdyje* 'it is necessary to order to take payments at double rate'; or *vzjati cenu* 'to take payment'

*volja* 'will, liberty, freedom': This word was found by Dunn (1976) in 2 NPiCs, whereas I found 3 NPiCs and 1 APiC:

*...i v cholopje prikaze tech ich cholopei zapisav v knigi, dat' im volja.* 'those kholops (bond slaves/serfs) who are written in "The Order on Kholops/Serfs" should be given their freedom'

*...dat' im volja.* '...it is necessary to give them freedom', or *im dati volja.* '...it is necessary to free them / to give them freedom', *a takim kabal'nym cholopam i rabam davati volju.* '... it is time to give freedom to such serfs and slaves'

*Polovina* 'half': This word was found in 5 NPiCs and in 5 APiCs. The NPiCs and APiCs occur with the same infinitive verbs, likewise in the 1 NSeCs-1 (with a dependent infinitive):

*... iz deneznyh okladov ubaviti polovina* '...salaries should be cut in half'

In the following example, both NPiC and APiC occur in the same sentence:

*polovina vzjati ...a druguju polovinu odat'*... 'it's necessary to take one half,... and give back another half...', or *polovina vzjati...* '...to take one half...', *drugaja polovina vzjav, odati* 'taking the other half, it is necessary to give...', *vzjati polovina* 'it's necessary to take the half'

APiC:

*vzjati polovinu že* '...it's necessary to take the half'

Another word which also occurs frequently in the PiCs is *zapis'* (here in the meaning of 'guarantee, warranty'): *vzjati poručnaja zapis'* '...to take a written guarantee'; *vzjat' poručnja zapisi v tom...* '...to take a written guarantee about...'

The most frequent infinitive verbs that occur in PiCs are:

*vzjat* ‘to take’ like in the following example: *i tu votčinu vzjat’ na gosudarja* ‘and that patrimony should be taken for the sovereign’

According to Dunn, the word *uboitca* ‘killer, murderer’ is often used in the accusative with an independent infinitive. However, in the entire text, the numbers of the forms in the nominative and in the accusative are the same in parallel contexts. Here, I present some examples where a masculine noun ending with -a is used in an NPiC, but only with the word form *kazniti* ‘to execute’, and, subsequently, I include 2 examples with an accusative.

*ili v te že pory on kogo do smerti ubjet, i togo uboitca, za to uboistvo samogo kaznite smertiju že.* ‘If he kills someone, he will become a killer, and it is necessary that he will be sentenced to death for that murder’

As discussed in chapter 5, the masculine nouns ending with -a are more common in the ASeCs (with dependent infinitive), but in this text only 3 examples were found in an APiC, for instance:

*...i togo uboitcu samogo kazniti smertiju že.* ‘...that murderer should be sentenced to death’

*žena* ‘wife’

*otdat’ s nim i žena* ‘it is necessary to give his wife with that man (as bond serfs)’

*i ženu i deti odati emu* ‘It is ordered to give his wife and his children as bond serfs to that master’

*i tu žinku odati prežnemu bojarinu.* ‘And it is ordered to give that wife to her former Boyar (master)’

*i tu emu ženu ...velet’ odati...* ‘and it is ordered to give him that woman’

In this text, also 8 NPiCs were found, for instance:

*Otseč/otseči ruka* ‘to cut off a hand’

*Učiniti/činiti trgovaja kazn’* ‘to impose a public execution’

*tomu besčinniku učiniti trgovaja kazn’* ‘that rowdy should be punished with a public execution’

Dunn cites the next example for the NSeCs-2 (with a gerund) from the Sob. Ul., and, according to Dunn, there are 4 examples with a nominative and 5 examples with an accusative. This was also confirmed by my analysis. However, I also found a few contexts for the NSeCs-1 (with a nominative and a dependent adverbial participle infinitive):

*vzjav poruka, vydati...* ‘after bailing him, it is ordered to give...’

The example given by Dunn (1978: 248):

*ta xožaja zemlja vzjav otdati tomu...* ‘Somebody who took this land is ordered to give it back to whom it belongs’

Other examples for NPiCs found in CHaRLi:

*i u nego ta zakladnaja kabala vzjav otdati zaimšiku.* ‘After taking that mortgage on the farm laborers from him, it should be given to the borrower’

*i u nego kuplenaja ego votčina vzjav, otdati v rozdaču, komu gosudar’ ukažet.* ‘After taking his patrimony from him which had been bought by himself, it is ordered to give it to whom the emperor will tell’

Examples for APiCs in other contexts:

*vzjav na kogo opasnuju gramotu...* ‘taking the letter of credit’

*i tu životinu vzjav u nego otdati čelobitčikom.* ‘after taking the animal from him, it is ordered to give it to the complainant’

*vzjav na vinovatom, otdati pravomu.* ‘taking that from the guilty, it is ordered to give to the right one’

*...tu lošad’ vzjav, otdati istcu.* ‘taking that horse, it is ordered to give it to the complainant’

Example for ASeCs-1, with a masculine noun in the plural:

*prožitočnye ich vdoviny i devkiny pomestja vzjav, otdati* ‘after taking the widows’ and girls’ residential estates, it is ordered to give...’

Dunn states that the Uloženie contains 35 clear examples for the ASeCs-2 (with a gerund), and he also includes the following constructions

*...dast na sebjia inomu komu služiluju kabalu vnov* ‘somebody will let himself go for the bond service again’

*...ne počitajuči otca i mater* ‘...not respecting both father and mother...’

*...tu votčinu kupja* ‘after purchasing that patrimony’

*...sudiju ranja* ‘injuring the judge’

## **8.      Kniga o skudosti i bogatstve, I.T. Posoškov. (Pos.) [The book about poverty and wealth written by I.T. Pososhkov]**

Staniševa (1966) analysed the language of “The Book about Poverty and Richness” by Posoškov. She found 131 examples for NPiCs and NSeCs-1 (with a dependent infinitive from a modal predicate like *nado* ‘should’, *nadobno* ‘need to’, *podobaet* ‘ought to’, and more often with *nadležit* ‘it is necessary to do’). Furthermore, she states that 81 of them have the meaning of ‘obligation’, as illustrated with the following example:

*podobaet emu ... pravda tvoriti* ‘He ought to act according to his conscience’

*to sudje pri sebe nadobno deržat ta zapiska* ‘The judge ought to keep that note to his hand’

Staniševa also distinguished NPiCs with an “independent infinitive of imperative nature”, which she exemplified with the following examples:

*Vsjakim tovarom polozžit cena ustanovlennaja* (p. 120) ‘Any goods should be charged with their set price’

*i posle porožaja bočka vyvesit* ‘And after that the empty barrel ought to be hung’, and etc.

Furthermore, she identified 50 NPiCs without any additional modal semantics whatsoever:

*Gde emu vzjat šuba i rukavitcy?* ‘Where should he take the coat and gloves?’

*daby ispravil ta nužda* ‘in order to solve that problem’

*ot prodažnogo otdeljat' velikomu gosudaru v pošlinu desjataja že čast'* "you ought to give the tenth part of profit as a duty to the Great Prince from the sales"

In this text, APiCs are rare, for instance: *tako i carju otdeljat' desjatinu* 'you ought to give the tenth part of profit to the King'

## 9. The examples from the Novgorod birch-bark letters and chronicles:

The birch-bark letters contain valuable material which for a long time has attracted the attention of various language historians and dialectologists since they represent features of the Old Novgorod dialect as reconstructed by the Russian academician Zaliznjak (1995, 2004). The texts of the birch-bark letters can be divided into two periods: the earlier period (from the 11<sup>th</sup> c. to the beginning of the 13<sup>th</sup> c.) and the later period (the 13<sup>th</sup> to the 15<sup>th</sup> c.). As already discussed in chapters 2 and 3, some scholars, such as Borkovskij (1963), argue that the non-canonical nominative object marking should be described as a dialectal feature of the Novgorod area, which, however, could not be supported by the empirical evidence. Nevertheless, since in the Novgorod dialect, the accusative and the nominative of masculine nouns could be distinguished, it was also possible to find some unambiguous examples of NPiCs with masculine nouns. This supported the view that the use of the non-canonical nominative object was not restricted by the structural properties of the noun in the object position. In addition to the examples already cited in chapter 2, the following example shows another instance of a noun in the nominative plural masculine:

*a mnъ naklady tvoe dati* 'for those losses I was ordered to pay'

Also, the next phrase that is not quite clear may be included here:

*na Domitr vozti doložzikъ* 'it is ordered to recover the debt from Dmitriy'

Here, the word form *doložzikъ* (*dolžki* 'small debts', diminutive of 'debt') is quite questionable. The ending - *ъ* used here could be interpreted both as an accusative and a nominative plural.

## 10. The use of PiCs in chronicles

As already mentioned in chapters 2 and 3, the use of PiCs and SeCs (with participles and finite verbs) could also be found in chronicles. For the language of the chronicles, the use of constructions with a dative and an independent infinitive is considered characteristic, as a “basic strategy of a chronicler” (Ševeleva 2010: 215). There are also some instances of PiCs and SeCs, for example:

*dan' imati (platiti)* ‘you need to pay a toll (a tribute)’

*i pristaviti kъ nimъ muži svoi. pokaziti imъ cerkovnuju krasotu.* ‘to assign their people to safeguard them and to show the beauty of the church’ (Ipatiev Chronicle (RRUDI))

## II. Gramoty Velikogo Novgoroda i Pskova (GVNP) [Charters of Great Novgorod and Pskov] (1434-1471)

The NPiC was used in the language of acts and other legal documents until the 18<sup>th</sup> century<sup>88</sup> (‘The Letters of Great Novgorod and Pskov, edited by S.N. Valka, Leningrad, 1949; *The Dvinskaja Rjadnaja* (*Rjadnaja* means ‘payment agreement’) Letters of the XIV century, I. Sreznevskij, The Facts and Notes on the Obscure and Unknown Written Sources, XXIX, St. Petersburg, 1876):

Examples of ASeCs-1 given in Staniševa (1966: 8):

*nedružbu svou velim činit* ‘we order to exasperate enmity’

*otъ rublja dati emu dolgaja* ‘I order to give him from the ruble 1 dolgeya’ (*dolgeya*-is a small coin, used in Novgorod in the 30-ies of the 14<sup>th</sup> century, 1 *dolgeya* is 0,42 grams of silver)

*i pašnja pachat' i kristian sodit s togo pomestje gsdruva služba služit* ‘and he plows that land, and he judges the peasants as well, and he provides a governmental service in that estate, too...’

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<sup>88</sup> ‘The Letters of Great Novgorod and Pskov, edited by S.N. Valka, Leningrad, 1949; *The Dvinskaja Rjadnaja* (*Rjadnaja* means ‘payment agreement’) Letters of the XIV century, I. Sreznevskij, The Facts and Notes on the Obscure and Unknown Written Sources, XXIX, St. Petersburg, 1876.

*pošnya emu Timofeju pochat' i sena kosit'* 'it is necessary for him, Timothy, to plow the land and to mow the meadow...'

*gsdrva sloužba sloužit a babkou svoju vdovu Annou da de života kormit* 'he provides a governmental service and feeds his grandmother, Anna-the widow, to the full'

*zemlja im poxat'* 'it is necessary for them to plow the land'

*pašnja emu Govrilou pachat' i sena kosit' i ugod'iem vladet'* 'it is necessary for him, Gavrilov, to plow the land ...to mow a meadow, and to own his farm (property)'

*...gsdrva služba služiti i plemjannitca svoja devka Daritca kormit' i poit'...* 'he provides a governmental service and takes care of nephew Daritsa giving her to eat and to drink'

*a pašnu on Trofim pašet* 'as for the land, so he, Trofim, plows that area'

The analysis of the Novgorod Agreements with the princes from Great Novgorod and Pskov ("The Letters of Great Novgorod and Pskov"), which are preserved only from the second half of the 13<sup>th</sup> century, is based on the earlier analysis by Kryś'ko (1994: 94-95). He made important observations about the use and distribution of the PiCs and SeCs briefly to be summarised here. In his work, he used the following examples from "The Letters of Great Novgorod and Pskov": # 6, 9, 10, 14, 15, # 1, 2, 3, 7, # 15, # 18, # 77, # 46, # 93, # 105.

He noted that for a long time, the examples of PiCs from this manuscript were treated as "original forms of accusative" (Borkovskij 1949, 367-368). In my terminology, they would thus be instances of APiCs. However, all these forms rather represent NPiCs, as exemplified here:

*deržati ti svoi tivunъ* 'it is necessary/required to keep one's assistant' ("The Letters of Great Novgorod and Pskov", #1 (Kryś'ko 1994: 94))

In the later letters, more instances with the same lexemes can be found in APiCs than in NPiCs, which is consistent with the trend of replacing non-canonical nominative marking with canonical accusative forms (that coincided with the old accusative in Old Russian). For example, in the Letters #1, 2, 3, 7, the clause *tivunъ deržati* 'to keep an assistant for the governor' changes its syntactic structure, which can be regarded as a "blurring of the original construction", whereas in the Letters 4, 6, 9, 10, 14, 15, there are still NPiCs to be found:



*tivunъ svoi držati na svoej čast', a novgorodtca na svoej* 'You, governor, should /ought to keep your own assistant inside your lands, but let the Novgorodians (the residents of Novgorod) keep their own land'

The same trends in use have also been noticed by Krys'ko for the next lexical unit as *posadnik* (*posadnik* was the mayor in East Slavic Medieval towns and cities, e.g. in Novgorod and Pskov). However, the form of "*tivunъ*" in comparison with *posadnik* has been preserved longer in the nominative form, which apparently was induced by its direct connection to the infinitive" (Krys'ko 2006). This fact was already discussed in chapter 5.8, with respect to the different "evolutionary" tendencies depending on the syntactic context for diverse types of clauses. Thus, such formulaic expressions as *tivunъ deržati* 'to keep a governor's assistant' were preserved in the NPiC for a long time. But some formulaic expressions like *slati Novgorodtca* 'to send a Novgorodian' took the accusative and was frequently used in APiCs already in the 13<sup>th</sup> century, probably due to its proximity to the constructions with a genitive and a negation, the formulaic expressions *deržati Novgorodetcъ* 'to keep a Novgorodian' was preserved in the NPiCs until the 13<sup>th</sup> century. Another interesting formulaic expression is *slati osetrnikъ* 'to send a sturgeonist', (a sturgeonist is a man who collects taxes from the fishing for sturgeon), which is frequently used in the NPiCs, whereas another one, *slati medovara* 'to send a mead brewer', is often used in the APiCs (the examples were taken from the Letters, #2, 3, 14). In the later letters, both formulaic expressions are used more frequently in the APiCs (see examples in the documents #6, 9, 10, 15).

Other examples for NPiCs which were provided in different studies by Staniševa (1966), Černych (1952), Bicilli (1933) and Sprinčák (1960) are listed here for further illustration:

*Ispava oučiniti, a neljubo ne deržati* 'You should impose a punishment, but they should not hold a grudge' (from the Agreement Letters, 1305-1433)

*i naša carskaja žaloval'naja gramota veliti im dat'* 'and order them to give our royal charter our grant-charter' (from "The Moscow Letters", 1601)

The following example should illustrate the decomposition of the NPiC, where the nominative form of the object NP is used with a personal verb (in my classification, this is an example of the NSeCs-2):

*A нынѣ est uvъdalъ ljubov' vaša pravaja* 'And now I was able to see your true love' (from the Polotsk Letters", approx. dated by 1300)

*I prikazčikam moim ta votčina (NOM) otdati (INF) ... dai s toe že votčiny s otdati (INF) prikazščikom moim ženam syna moego dve derevni derevnja (NOM) Slepandino da derevnu (ACC) Baranovo.* 'And I order to give that inherited estate to my estate managers. And I order my estate managers to give two villages from those lands to my wife and to my son: the village of Slepandino and the village of Baranovo.' (1579; from the Anthology on the History of the Russian Language, Volume 1, 159, 1938, Obnorskij, Barkhudarov).

*rybu lovit'... mel'nitca stavit'* 'to get fish ... to build a mill'... (# 31)

*ta mel'nitca (NOM) postavit' (INF) emu (DAT) veleno (MOD)...* "...*melnitcu (ACC) postavit' (INF) emu (DAT) veleno (MOD) (# 9)* 'the mill should be built by him by the order (i.e., he is ordered to build that mill)'

[from: The ancient letters and different documents (the materials for the Kazan diocese). Proceedings of the society of archaeology, history and ethnography, the XVIII volume, 1,2,3, Kazan', 1902].

### III. Examples of NPiCs from folklore texts

Here, just a few examples are given for the use of the NPiCs in both proverbs and sayings, which are justified by the purpose of such texts that often express the rules of behaviour, actions, and ethical social norms:

*Varit' braga, poterjat' i fljaga* 'To make home brew is to lose a jug'

*Govorit' pravda, poterjat' družba* 'To speak the truth is to lose the friendship'

*Palit' svinja, nakormit' semja* 'To singe the pig, to feed the family'

*Ruka priložit' i duša položit'* 'To give a hand and to give the heart'

## List of Tables and Figures

<b>Table 1</b> Structural properties of the nominative object of infinitive (Timberlake 2014).....	73
<b>Table 2</b> Timberlake’s reconstruction of the changes in the application of the nominative object rule in the history of Russian.....	76
<b>Table 3</b> An overview of theoretical proposals in different theories .....	81
<b>Table 4</b> Historical declension of nouns in the early Old Novgorod dialect.....	87
<b>Table 5</b> Factors (variables) potentially favoring the non-canonical object marking in the NOC .....	111
<b>Table 6</b> Description of text types included in CHaRLi.....	121
<b>Table 7</b> The content of CHaRLi corpus (text types per period).....	123
<b>Table 8</b> The selection of text samples included in the Old Russian subsection of the CHaRLi. ....	126
<b>Table 9</b> The selection of text samples included in the early Middle Russian subsection of the CHaRLi. ....	126
<b>Table 10</b> The selection of text samples included in the early Middle Russian subsection of the CHaRLi. ....	127
<b>Table 11</b> Description of some manuscripts and editions for CHaRLi. ....	128
<b>Table 12</b> Variables with a possible effect on the choice of construction. ....	131
<b>Table 13</b> Illustration of the metadata information after extracting from CHaRLi .....	134
<b>Table 14</b> Use of nominative object constructions in the various periods and areas. ....	151
<b>Table 15</b> Number of PiCs for the Old Russian period for statutory and hybrid texts.....	152
<b>Table 16</b> Number of PiCs for the Middle Russian period for statutory texts. ....	155

<b>Table 17</b> Number of PiCs for the Old Russian period for hybrid texts. ....	160
<b>Table 18</b> Number of NPiCs and APiCs in all samples.....	162
<b>Table 19</b> Distribution of NPiCs and APiCs in all samples. ....	164
<b>Table 20</b> Different constructional variants for NPiCs and APiCs with examples from CHaRLi .....	166
<b>Table 21</b> The distribution of constructional variants of NPiCs and APiCs in the Old Russian period.....	167
<b>Table 22</b> Different constructional variants of NPiCs and APiCs with examples from CHaRLi. .....	168
<b>Table 23</b> List of constructions.....	194
<b>Table 24</b> Distribution of different types of construction, all samples.....	194
<b>Table 25</b> List of variables.....	203
<b>Table 26</b> The results of the ANOVA for the dataset of the Middle Russian period.....	210
<b>Table 27</b> List of the most frequent verbs used in NPiCs. ....	213
<b>Table 28</b> List of the most frequent verbs used in APiCs.....	214
<b>Table 29</b> The verbs used most frequently in NPiCs in the dataset for Old Russian .....	216
<b>Table 30</b> The verbs used most frequently in APiCs in the dataset for Old Russian. ....	216
<b>Table 31</b> Distribution of verbs used with nominative vs. accusative (Old Russian). ....	216
<b>Table 32</b> Most frequently used verbs with nominative vs. accusative.....	217

## List of Figures

<b>Figure 1</b> The structure of the Old Russian modal construction according to Jakob (2003:77).....	103
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<b>Figure 2</b> Distribution of the NPIC and the APIC in different copies of <i>Russkaja Pravda</i> ref. Dunn (1978: Appendix I). .....	113
<b>Figure 3</b> The Old Russian period in the CHaRLi corpus: distribution of text categories. ....	120
<b>Figure 4</b> The Middle Russian period in the CHaRLi corpus: distribution of text categories. ....	120
<b>Figure 5</b> Illustration of the drop-down annotation list for the ChaRLi (within GATE-Annotation tool) .....	132
<b>Figure 6</b> Illustration of the data-set entries for NPICs and APICs from CHaRLi for Old and Middle Russian.....	132
<b>Figure 7</b> Corpus data visualization with ANNIS (Original source: <a href="https://corpus-tools.org/annis/">https://corpus-tools.org/annis/</a> ).....	135
<b>Figure 8</b> Search results with an annotation grid in ANNIS (Original source: <a href="https://corpus-tools.org/annis/">https://corpus-tools.org/annis/</a> ).....	136
<b>Figure 9</b> Novgorod birch bark charter No. 10 (1160 - 1180) (Original source: <a href="http://www.gramoty.ru">www.gramoty.ru</a> ). .....	137
<b>Figure 10</b> Search options in the birch bark data base (Original source: <a href="http://www.gramoty.ru">www.gramoty.ru</a> )...	137
<b>Figure 11</b> The search engine for the Old Russian subcorpus (Original source: <a href="http://www.ruscorpora.ru/old/search-old_rus.html">http://www.ruscorpora.ru/old/search-old_rus.html</a> ).....	138
<b>Figure 12</b> The search engine for the Middle Russian subcorpus (Original source: <a href="http://www.ruscorpora.ru/old/search-mid_rus.html">http://www.ruscorpora.ru/old/search-mid_rus.html</a> ).....	138
<b>Figure 13</b> Results extracted from ruscorpora (date: 01.10.2016).....	139
<b>Figure 14</b> Scans from the Kartoteka Slovarja drevnerusskogo jazyka at the Russian Academy of Sciences (own collection). .....	140
<b>Figure 15</b> Distribution of PiCs in the Old Russian sample. ....	154

<b>Figure 16</b> Distribution of PiCs in the Middle Russian sample. ....	158
<b>Figure 17</b> Distribution of PiCs in the Middle Russian sample (hybrid texts). ....	161
<b>Figure 18</b> Overview of the frequencies of NPiCs and APiCs in statutory texts in CHaRLi. ....	164
<b>Figure 19</b> Overview of the frequencies of NPiCs and APiCs in hybrid texts in CHaRLi.....	165
<b>Figure 20</b> Association plot for NPiCs (Old Russian). ....	172
<b>Figure 21</b> Association plot for APiC (Old Russian). ....	173
<b>Figure 22</b> Association plot for NPiC (Middle Russian). ....	175
<b>Figure 23</b> Association plot for APiC (Middle Russian).....	176
<b>Figure 24</b> Plot for PiCs depending on the presence or absence of the DatS in Old Russian (left) and Middle Russian (right).....	177
<b>Figure 25</b> Plot for different types of construction depending on the presence or absence of DatS in the Old Russian period. ....	178
<b>Figure 26</b> Plot for different types of construction depending on the pre- or post-verbal position of the object NP in the Old Russian period. ....	178
<b>Figure 27</b> Plot for different types of constructions depending on the presence or absence of DaTS in the Middle Russian period. ....	179
<b>Figure 28</b> Plot for different types of construction depending on the pre- or postverbal position of the object NP in the Middle Russian period.....	179
<b>Figure 29</b> Different types of construction depending on the presence or absence of the DatS. ....	182
<b>Figure 30</b> Different types of construction depending on the pre- or postverbal position of the object NP. ....	182
<b>Figure 31</b> Different types of construction depending on the presence or absence of the DatS in Sudebnik 1497.....	184

<b>Figure 32</b> Different types of construction depending on the pre- or postverbal position of the object NP in <i>Sudebnik 1497</i> .....	184
<b>Figure 33</b> Different types of construction depending on the presence or absence of the DatS in <i>Lunnik</i> .....	186
<b>Figure 34</b> Different types of construction depending on the pre- or postverbal position of the object NP in <i>Lunnik</i> .....	186
<b>Figure 35</b> Different types of construction depending on the presence or absence of the DatS in <i>Uloženie</i> . ....	188
<b>Figure 36</b> Different types of construction depending on the pre- or postverbal position of the object NP in <i>Uloženie</i> .....	188
<b>Figure 37</b> Different types of construction depending on the presence or absence of the DatS in <i>Pos.</i> ....	190
<b>Figure 38</b> Different types of construction depending on the pre- or postverbal position of the object NP in <i>Pos.</i> ....	190
<b>Figure 39</b> Different types of construction depending on the presence or absence of the DatS in <i>Morozov</i> .....	192
<b>Figure 40</b> Different types of construction depending on the pre- or postverbal position of the object NP in <i>Morozov</i> .....	192
<b>Figure 41</b> Temporal distribution of different types of constructions, all samples. ....	195
<b>Figure 42</b> Relative frequency of PiCs, all samples.....	197
<b>Figure 43</b> Proportion of verbal patterns used with the nominative or accusative in the Old Russian period. ....	218
<b>Figure 44</b> Proportion of verbal patterns used with the nominative or accusative in the Middle Russian period. ....	218

<b>Figure 45</b> Results from the text of Uloženie (Sob. Ul.) Note: give = verbs with the meaning ‘to give’ and take = verbs with the meaning ‘to take’. .....	220
<b>Figure 46</b> Model of nested competing rules .....	249



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## **Declaration**

I declare that the written and electronic versions of my doctor's thesis submitted to the University Library match the accepted thesis. I have only corrected shortcomings and fulfilled the conditions of which I was informed at the defence, and their fulfilment has been confirmed by the chair of the Doctoral Degrees Committee.